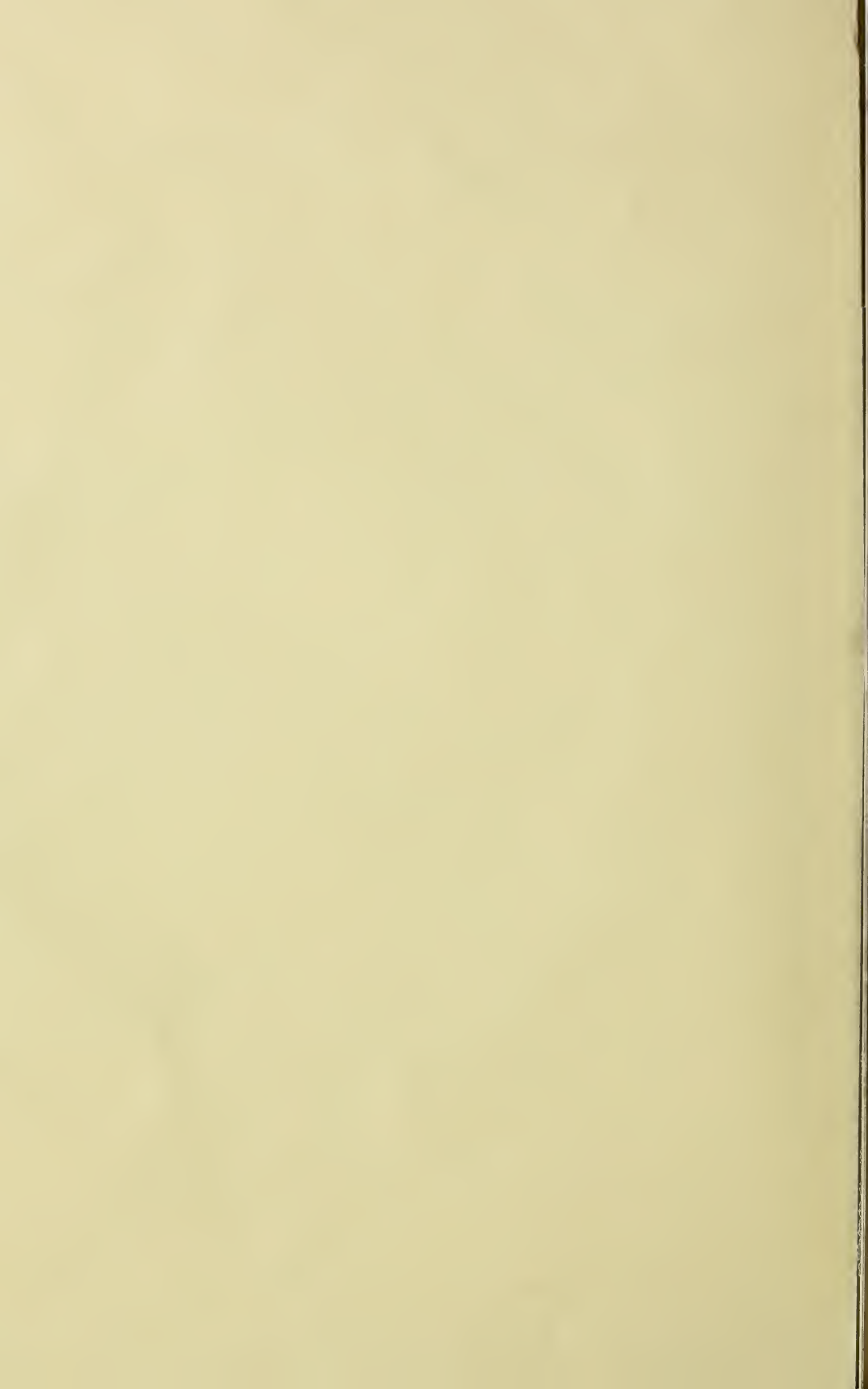


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THE MARYLAND FARMER:

DEVOTED TO
Agriculture, Horticulture, and Rural Economy.

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No. 4.

UNDERDRAINING.

This is one of the branches of high farming in which instruction is never unseasonable. The work of drain structure may be performed at any season that the time and labor can be spared from farm work, which cannot be deferred without loss, except where snow and frost lock up the soil, or high water interferes. An experience of over fifty years in draining and underdraining, and in engineering for drains in several States, and under a variety of circumstances, has thoroughly established the conviction in our mind, that money and labor expended in judicious draining, in conjunction with sub-soil tillage will, under circumstances of ordinary propitiousness, give a better return than in any other branch of high farming.

Prior to the introduction of draining tiles, we were obliged to use such material as was obtainable, and best adapted in each respective locality. The enumeration and description of all the substances, and the variety of the forms of each, that we have used as underdraining material, while it would be interesting, and, perhaps, amusing, would lack utility to that degree, that such obsolete practices cannot be allowed to occupy our valuable space; hence, in treating of this all-important branch of modern husbandry, we shall confine ourselves to the recommendation of the kinds of material, and the forms to be used; and the modes of construction that will, wherever it is practicable to adopt them, prove most economical in the end. Our protracted experience compels us to discourage the use of destructable material for underdrains. We refer to wood in all the various forms used. Until within the past few years, the material that we have most commonly used is stones, which we have placed in all conceivable positions for receiving and conducting water.

We have finally abandoned all other methods of placing the stones in the ditch, that is to serve for the infiltration of water, and settled upon the mode illustrated in Fig. 1, an illustration of a cross-section

tion of a stoned underdrain, the best known to us.

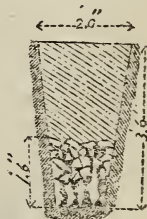


Fig. 1.

It will be seen that the stones are placed in the ditch, by placing the thinnest and flattest ones against either bank, or wall of the ditch, and paving the intermediate space with those of medium size, setting them on the smaller ends, like paving, and filling over them to the required depth, with such sizes and forms as are at hand, (unless too large, when they should be broken,) always, however, reserving the smallest to be used for the upper surface.

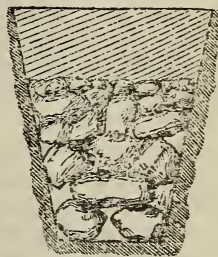


Fig. 2.

Fig. 2 represents one of the old common modes of placing stones in drains, which has long since abandoned, for various sufficient reasons that may be inferred by the reader, after noting the claimed advantages of methods which we shall explain.

Fig. 3, represents a longitudinal section of an underdrain, in which tiles are used as draining material, and a silt pit; which is simply a portion of the ditch excavated, say one foot deeper than the balance of it, and said pit filled with small stones. The tiles connect with the stones at either

end of the pit, as shown; and the water, after it has risen in the pit to the height of the egress pipe,

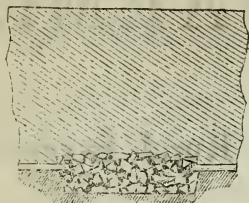


Fig. 4.

flows on as before, having deposited the silt it contained, among the stones in the bottom of the pit. Ordinarily, said pits are placed two hundred feet apart.

Our favorite material for filtrating drains, after a long experience and close observation of the operation of all that we have used, is *gravel*. Fig. 4, represents a cross-section of an underdrain, in which gravel is used as the draining material.

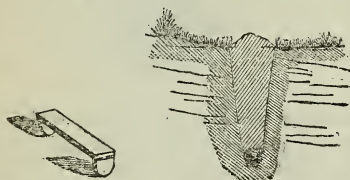


Fig. 5.

Fig. 4.

The drain is represented as filled, with a view, particularly, to call attention to an important thing to be observed in underdrain construction, viz: that the earth returned should be raised so as preclude the flow of surface water over the drain, for obvious reasons. It will astonish all who test the efficiency of the *gravel* drain, when they behold the large quantity of water that a drain of gravel will discharge, which is only 4 by 6 inches in cross section, and has but two inches fall in ten feet in the line of the axis of the drain.

COL. WARING'S OPINION OF GRAVEL.

In a late issue of the *American Agriculturist*, in No. 61, of the "OGDEN FARM PAPERS," which are, in the main, sound and safe guides in the practical operations of the farm, we notice that he alludes to *Gravel* drains, and says:

"The most striking, and, I think, the most valuable suggestion that has been made in connection with draining during the past few years, comes from Mr. Wilkinson, of Baltimore, who recommends that where tiles cannot be procured, the conduit be made with gravel. The ditch is to be cut very narrow, especially at the bottom, regularly graded, as if for tiles, and then filled to a depth of from six to ten inches with gravel, covered with shavings or leaves, but only a very little of these, just enough to prevent the earth, during the filling, from rattling down into the gravel. There might be some danger, if the quantity used were large

that on its decomposition, it would work down into the gravel and cause obstructions. After the covering is put on the gravel, the ditch is to be filled, the earth being well packed, as is recommended in tile draining. The gravel may be coarse or fine, but, whatever its quality, it would be better that the finest and the coarsest parts should be screened out, so that that which is used may be of uniform coarseness, and more porous than if all were mixed together. I am disposed to attach very great importance to this method of draining; where gravel can be cheaply obtained, it must be very economical; as there can never be a very rapid current of water passing through the conduit to abrade the sides of the ditch, there will be little danger of silting up; and, as the gravel will lie snugly together, there is no danger of its misplacement, or of the injurious entrance of vermin. The drain would be everywhere open to receive the infiltration of water, and for all lateral drains the arrangement seems very nearly perfect. Doubtless a channel of gravel averaging four inches wide, and six inches deep, would furnish an ample conduit for a drain of 1,000 feet long, or for the draining of an acre of land. For the outlet of larger areas, or for laterals aggregating more than 1,000 feet, main drains of somewhat larger size, and furnished with broken stones, small cobbles, or better still, with the coarser screenings of the gravel, will ordinarily be found sufficient. It is only when a very large amount of water is to be removed, that any further provision will be necessary. In such a case, either an open ditch, or a drain made of thoroughly well-laid stonework, would be the best where tiles are not available."

We scarcely need add anything in the way of recommending the use of gravel as a draining material, after the endorsement of it by one so competent to compare it with other draining material, as Col. Waring, who is the author of a work, "*Draining for Profit and Draining for Health*," published by the Orange Judd Company, in New York City; which every farmer who has a ditch to make, should possess. We could quote from private letters, a number of them from the most distinguished culturists of our country, remarks of the highest commendatory character in regard to our invaluable discovery of this new, cheap and thoroughly efficient draining material, and thanking us for giving it to the world through the medium of the *Maryland Farmer*, for which, one gentleman remarks, "*it is worth to me many years' subscription.*"

We would simply add, with regard to the construction of gravel drains, that we use the silt pits with them, and would not omit their use on any account.

Fig. 5, represents a short, portable scaffold, or low staging on which the operator stands whilst he is completing the excavation in the bottom of a ditch for the introduction of the gravel, as the bottom is too narrow to stand in.

Where the use of the ditching machine is practi-

cable, and gravel may be conveniently obtained, the cost of underdraining is but nominal, as compared with old methods of construction and the use of stones, tiles, &c. We find in many districts on the coast, and on estuaries, exhaustless beds of oyster shells, but no gravel.

Next to gravel we prefer the shells, and in quicksands, which we frequently encounter, shells are preferable to plank for producing a solid sole on which to construct a drain.

We continue to ram the shells into the quicksands, seeming, in some instances, an abyss, until a bed or sole is produced for the superstructure.

Agricultural Calendar.

FARM WORK FOR APRIL.

This may justly be called the opening month. Nature seems to find its re-invigorating powers. The earth unlocks the frozen treasures and dons her green apparel; while the buds start and the young leaves appear with the early blooming flowers, to add to the charming effect of the bright, green carpet, with its soft, velvety reception for the gouty foot of age, and the naked one of playful childhood. But *April* does not come only to delight and to amuse with her smiles and tears, her early glimpses of the change from winter to summer, but to say to all who cultivate the soil, "up and be stirring; farmers, shake off the enervating lethargy of the ground-hog, and energetically begin your year's labor. Hitch up your teams and go to work in earnest, unless you desire to be in the crowd of hopeless grumblers—blamers of the season—at the close of the year. "The sweat of the brow" alone, can secure a good return, in money value, for our employments on the farm.

FENCING AND DRAINING.

We presume your fencing and gates are all in good order, and if, owing to the severity of the past winter you have not completed your new ditches, cleaned out, and off the sides of, the old open ones, and examined to see that the underdrains are working right, let us advise you to do so at once.

TOBACCO.

This has been a very unpropitious winter for sowing tobacco seed, so the planter should be alert to embrace the first chance to put in the seed, which may yet be sown to bring plants in time, and especially, if the seed had been sprouted or swollen in earth under cover, or in a bag buried in the ground, or kept moist and laid in the hot-bed. The latter process would in three or four days give such a start to the seed, that if sown on light,

warm soil, would shoot into stem and leaf in a very few days, provided the weather was favorable and warm. This has been a bad season for stripping and conditioning tobacco, though March was more favorable. Let us say, do not hurry your tobacco in market. At present there is a perfect stagnation of business of all kinds, and gold has gone up. But all the financial men, and the merchants of experience, look confidently to active trade before June, especially in tobacco, grain and meat, things peculiarly concerning the farming interest. Activity in agricultural products will set in motion the wheels of commerce, and give life to all and every other of the pursuits of man.

CORN.

We refer our readers to the special article on corn cultivation, in another column of this number, which we took much pains and time to prepare, in the hope that it will be attentively read, and be of some value to our people who raise, or who are interested in any way in this wonderful natural product of America.

CATS AND BARLEY.

If you have not yet sown your oats and barley, do not neglect it a day longer, and follow our suggestions as to the two crops which were given in the last two numbers of this magazine.

POTATOES.

Plant on well prepared and highly manured land, several acres of this remunerative crop. Potatoes, properly cultivated, will pay well at fifty cents per bushel. Plant Early Rose, Peerless or White Peach Blow. We esteem them in the order named. The old White Mercer was the best potato ever grown, but it deteriorated, and has been abandoned, except by a few who of late years have grown good crops of the best quality. It may be, that it is again to take its place in the front rank of this edible root.

SUGAR BEET AND MANGOLD WURTZEL.

If you design planting Sugar Beet or both, and Ruta Baga, manure now the ground heavily, plow deep, and before the first of May, cross plow and harrow, and give a heavy dressing of some suitable fertilizer, harrowed in. The ground will then be in a nice condition to be slightly ridged, and the seed drilled on the ridges, about the 10th of May.

CARROTS AND PARSNIPS.

If you design to raise Carrots and Parsnips for your stock, do not put off sowing a moment, on rich well-prepared ground, with a plenty of ashes and bone dust as a manure.

STOCK.

Let your ewes and lambs have the first week or ten days of this month, a run on your rye field,

Take care of the young lambs; give them what crushed oats and bran they will consume, and feed the ewes well. Calves should only go to their mothers three times a day, or what is better, raised by hand, giving them the best of feeding and attention. It will well repay. Working beasts, feed and water and rub and brush with great punctuality and liberality.

GRASS SEEDS AND PLASTER.

If not heretofore done, as should have been done, sow grass seeds and plaster, where needed, and do not, we implore you, be niggardly mean in the application. Too many farmers think a half bushel of plaster and a half gallon of clover seed is enough. This homeopathic treatment will not do in farming; old *Jethro Tull*, to the contrary, notwithstanding.

In conclusion, let us urge you to determine at this time, the beginning of the working season, to cultivate no more land than you can work well; to manure or fertilize every acre you till, and cultivate the different crops thoroughly; look to the breeding of horses, sheep and cattle, with hogs and poultry, all of which of the best breeds you can obtain. You will then make farming pay. We do not hesitate to say, that you need great reform, and you will continue to go behind hand, unless you resort to the high pressure system, and grow or raise every thing on the farm that the farm needs, except fertilizers. Breed more stock, and raise more grass to keep that stock. Consume all your corn at home, and send any you have for market, not in *bags*, but on the *hoof*.

GARDEN WORK.

GARDEN WORK FOR APRIL.

As on the farm, so it is in the garden, a month for industrious and watchful application. Unless the proper steps be now taken there will be no good garden the coming summer. First spade the whole deeply with plenty of strong manure, then sow plaster and salt in proportionate parts of one part plaster and four of salt, to which mixture may be added six parts of ashes and one of soot, all well intermixed, at the rate of five hundred pounds per acre. Rake it in and let the beds lie until wanted for seed or plants.

Cauliflower, Cabbage, Celery, Pepper, Lettuce, Tomato and Egg plant.—Prepare a rich nice bed and sow in drills six inches apart, plenty of seed of each of these delicious and important vegetables, and as they grow thin out so as to leave them three or four inches each apart in their drills. Keep clean and well stirred the ground between the drills,—

The plants pulled out may be planted in a cold frame and watered, and will perhaps be better rooted than those left in the seed bed. This rich border will give you great satisfaction if you only will give it your attention for a few months every day.

Radishes.—Sow every few days to have a succession of this elegant and excellent appetizing fruit vegetable.

Okra and Early Corn.—Plant as soon as the weather is settled and pleasant.

Spinach and all Salads.—Sow seeds now and at intervals of ten or fifteen days.

Nasturtiums.—Plant these in rich light soil three inches deep, and if the climbing sort provide them in time with prongy poles or a good trellis. They are valuable. They make elegant pickles, and better to eat with mutton than the famed foreign.

The flowers are excellent condiments, and enhance the delightfulness of a sandwich for lunch. They are more wholesome and yet as pungent as mustard or pepper. In fact, a few of these flowers mixed well with good butter and spread on good bread makes of itself a cheap but elegant and stimulating sandwich.

Melons, Squash, Cucumbers, &c.—After the middle of the month plant squash, cucumbers, and some melon seed, but get the ground ready for the water melon and the cantelope patch. Run three furrows ten feet apart, back to back, then cross with a deep furrow eight feet apart, to leave checks eight by ten feet; in each check put a peck or half bushel of stable manure, whitened with plaster and let it so stand until ready to plant. When you determine to plant, make hills at each check, intermixing the manure and add a half gill of leached ashes. The hills should be broad and flat, and raised six inches above the level of the ground.—Then put in ten or twelve seeds and thin down as they grow to two or three to a hill. Cantelopes may be planted four by ten or if in a separate patch, six feet each way. These delicious earth fruits ought to be grown in great quantities—they are so good for the health and comfort and luxury of the children, the friend and the “stranger within your gates.” A fine melon or cantelope is a rich repast for breakfast, dinner or supper. Each represent the gigantic proportions of America and her superb productions.

Strawberry Beds.—If not already done, clear them from all weeds or grass, work well, manure if it be necessary and mulch with straw, leaves, corn stalks, tobacco stalks, or place oyster shells, so that the ground will be shaded, the grass and weeds will be estopped from growing and the fruit protected from dirt and grit. All these important matters will

be accomplished by a few hours work at this time. If this month be very dry, give your beds once a week a soaking watering.

Onions, Medicinal and Culinary Herbs.—Sow the seeds, or set out the plants or bulbs of all these necessary appendages to good cooking and health. The lavender is excellent in various sicknesses, in various dishes and drinks and a delightful perfume when put amongst the house linen. None of these easily cultivated plants but what are of great value at times, and are too often neglected by our most thrifty house-keepers.

Peas and Beans.—Continue to sow every week or fortnight a few rows of Peas and String Beans for a succession. The white dwarf beans are best. The Champion of England, and the black eyed marrow-fat peas, are our favorite for sowing now. The Alpha is an early and great bearer but in richness does not come up to our favorites. The Lima Bean can be planted the last of the month. This is, as our columns have testified, too important an object of culture to be neglected. We shall at the right time have more to say in our plain way of this culinary vegetable climber.

Carrots, Parsnips, Beets and Salsify.—Sow seeds of all, on rich land, where plenty of ashes have been used, or give a dressing of fine bone dust.—Missouri bone meal, four hundred pounds to the acre, with a little plaster. Pour hot water on the seeds and let them soak for twenty-four hours before planting, then dry and rub them in ashes or plaster.

Potatoes.—Set out a bed of potatoes and see that they have all the manure, ashes, &c., they may want for food, and if so, they will yield a heavy crop of nutritious delightful food, for your family or the public.

Gooseberries and other small fruits.—These should have been attended to before, but if neglected, at once set to work, make new plantations, trim the bushes, cut out all the old wood, thin the new; dig about them, and then give a mulch of rich, but coarse stable manure.

Dwarf Trees.—Trim, prune and plant out new ones. You cannot have too many keep the ground light and clean in your dwarf fruit orchard, and mulch the trees heavily with grass or straw, and do not believe in the lazy doctrine that they do well if left in the grass and weeds. Of this more anon of our own experience some years ago..

BENJAMIN FRANKLIN occasionally stumbled upon the truth. He said: "The eyes of other people are the eyes that ruin us. If all but myself were blind, I should neither want a fine house nor fine furniture."

ORCHARD GRASS IN KENTUCKY.

A correspondent of the *Prairie Farmer* says:—"Orchard grass seed sells at from \$1.50 to \$2.25 per bushel. It should in all cases be sown in March and harrowed in with oats. Sow from 1½ to 2 bushels per acre. It will not thicken after it comes up. When well set it makes a fine sod. It will yield 10 to 15 bushels per acre of seed. It gets ripe the last of June generally. Cut and shock the same as wheat. The best way to get the seed out is to tread with horses or thresh with a flail, the seed being so light (14 lbs. per bushel) that to thresh it with a machine it will all blow away. The straw, when well taken care of, makes better feed than wheat or rye straw. It affords good fall pasture, and also good pasture in the spring, as early as March, and you can keep it pastured down until the middle of April; then it will make a good crop of seed.

"We in this county (Washington) sow more of the grass than in any other county in Kentucky, and we class it above all other grasses (blue grass not excepted) because it affords as much pasturage as any other grass, comes up earlier than any other, and besides we can save seed enough to sell for more money than the same field would make in wheat. This is no supposition; but it is what my neighbors and myself know by trying it."

The testimony of this Kentuckian will no doubt surprise many of our farmers, who have been led to believe that no herbage grown on the bosom of the earth is equal to the blue grass grown in Kentucky. Some say that blue grass hay is equal to timothy hay and a gallon of oats per diem. We have had much experience in the production and use of orchard grass, both for pasture and cured for hay, and have recommended it for more than twenty years. Where the soil and climate are congenial to it, we consider it one of the most valuable grasses grown in this country, as a forage grass, but it does not compare with red clover as a renovator of soil.

We must differ with Kentuckian in regard to the straw of orchard grass, on which seed has been ripened, being equal in value for forage, or "better than wheat or rye straw."

We consider light rye straw greatly superior.

Orchard grass to be most profitable for pasture, should be grown on very fertile soil, and 2½ bushels of seed per acre is preferable to 1½ to 2 bushels, as recommended. We have sown 3 bushels and many to whom we have recommended this quantity insist that it is better than less. When used for pasture, after sward is well established, it is the better for pasturing early, or before it has made too rank a growth, and it should not be allowed to become tall and coarse.

Thick seeding corrects one of the worst habits of this grass, viz., its tendency to "tupsack."

When to be cut and cured for hay, it should not be allowed to ripen a seed, and it is the better for not being too much exposed to sun; it may have its water evaporated to a great degree by fermentation in the cock.

"FARMING WITHOUT MANURE."

We cannot conceive of any trio of words in our language that will express a greater absurdity than the idea conveyed in the above heading.

The above quoted text, our readers will recollect, was used in our March number as the heading of a sterling article from the pen of our new contributor, "*Cincinnatus*."

The fallacy of the system intimated is made so thoroughly axiomatic by *Cincinnatus* in his Paul-like manner, in "words of truth and soberness," that we feel that little can be added that will strengthen the premises taken, which he concludes with the following sage statement: "No more important question ever engaged the attention of the people, than that which tends to the solution of the problem of successful agriculture; and the corner stone of this fabric—so vitally necessary to the existence of a prosperous community—is liberal and judicious manuring."

No sentiment is more true, and we would that we could so forcibly impress it on the minds of our rural readers, that all would be led to heed its profitable teaching.

We are on the eve of the Centennial of the so called "New World."

We propose to celebrate it by an International gathering on the spacious grounds, sagaciously selected, in suburban Philadelphia.

Our country is acknowledged, and correctly so, to be strictly an Agricultural one. We have often heard the "spread eagle" boasts, that "*we can feed the world*."

Assuming that this is true to day, with our present growth of population, how long before we shall, by our regularly waning production, be so reduced in the yield of our great staple, that we shall be obliged to become importers instead of exporters?

A definite answer to this vital question is difficult, but an approximate one may be readily reached.

Let those who have the time examine the production census tables for three decades, and estimate the reduction and take the growth of population by immigration and natural increase, and allow both to continue even as they have been in the past, and the problem will be easily solved, and it will be clearly proved that, in the early future our status will be changed, and we will be importing breadstuffs.

The evil day may however, be longer deferred by continuing the ruinous course so long and so generally pursued in several of the older States of the Atlantic Coast, viz: that of "skinning" and re-"skinning" the arable land, until all productive

vitality is exhausted, then abandoning it to the meagre spontaneous growth that Nature, the modest old dame, will, as by magic, produce out of the abandoned barren, with which to cover her naked bosom.

These wanton soil destroyers, on abandoning the land of their nativity, for which the barbarous savage would entertain more patriotic attachment, will, as thousands have done in the past, migrate to some virgin spot, and there pitch their abode, to ravish and despoil it, and thus perpetuate one of the most disgraceful practices of the whole catalogue, that have stained the escutcheon of boasted civilization.

There is little encouragement for the guardian journalist to attempt to advise those who can be guilty of such terracultural vandalism; but it is his duty, like the spiritual teacher, to pray for faith, and to labor for reform even against all reasonable hope. We will not shirk so imperative, and so obvious a duty.

But to what shall we resort to reach and convert to a sense of duty, such thoughtless indiscreet men?

They have long had with them and around them, that teacher of acknowledged efficiency and potency, experience, and have not heeded his plain and forcible teachings.

They have seen one field, and plantation after another, exhausted, *by taking all, and returning nothing*, until they cannot but realize that if all culturists were to pursue and continue this exhaustive, thriftless course, that inevitable ruin must be the sad fate of our fair land, and of our erring race.

This deplorable industrial malady and national epidemic, has everywhere a certain remedy, one that has never been known to fail, and it has long been used, and is the only reliance in all prosperous producing countries. The culturist needs only to adopt, and strenuously to adhere to the use of this sovereign restorative of lost fertility, and the equally reliable preventive of the exhaustion of productiveness. The prescription needs not to be written or expressed in symbolical, mysterious characters, but is all contained in the few simple sentences, which we shall express in common parlance. *Plow no more than you can afford to plow well, at the proper time, and to a proper depth.—Manure with proper fertilizers for the soil and crop, and so liberally that there shall always be an excess of food in the soil in an available form, for each incumbent crop. Seed liberally with the proper grasses for the uses to which they are to be applied. Neither pasture nor mow so late in the season that a liberal mulch, or covering will not grow for winter protection. Never lose sight of the fact, that PLANT FOOD can be had at less cost by growing it where it*

is needed, than in any other way. Never allow a SWORD to "run out" or become thin and light before breaking it up for a rotation of crops. Diversify the ROTATION so as to avoid the production of several crops that extract largely from the soil the same elements of fertility. Never PASTURE off closely the herbage on a sward to be turned in. Never turn a SWORD under more than six inches in depth; but if judicious to plow a greater depth, as it very generally is, use the sub-soil plow. Never allow a Hay-crop or a weed to ripen a Seed. Never plant or seed so thickly, but that every plant may have a proper area of SOIL and AIR. Never till hoed crops so deeply as to ROOT PRUNE the plants; it is like muzzling an animal; but continue to cultivate the surface as long as practicable. Had we space, and the reader patience to read, we might add indefinitely to the above catalogue of prescriptions for preventing the exhaustion of the fertility of land, and for making "farming pay;" but these, if heeded, will accomplish our ostensible object.

TRIMMING FRUIT TREES.

Seasonable articles are the most profitable ones to the readers of Agricultural Journals, and very many valuable suggestions have been lost by their being inopportunately published.

It is not to recommend the pruning of fruit trees at this season that we agitate the subject now, but to warn such of our readers as have not been so unfortunate, as to have already pruned their trees, to defer it to the most auspicious time in the whole year for pruning all kinds of fruit trees, viz: about the summer solstice. It is not practicable, neither is it important to prune to a day; but any time between the middle of June and the middle of July will be found to be better than at any other season of the year. Trees are forming wood rapidly at this period, and if a limb is properly removed at the time we have recommended, a wound, even two inches diameter, may be healed over before the trunk will decay or check and absorb water, which will sooner or later occasion decay at the heart of the limb or stump, which will extend to the trunk, thence down through it, to the ground.

A large majority of the trees of old orchards which have been trimmed in winter, or early spring, are hollow hearted, from the cause intimated, and said trees are generally ruined with sucker growth on them, both of which evils might have been avoided, had the pruning been performed at the proper time.

No pruning is better than pruning too much, or at the wrong time.

We have much to say on this subject, but we shall reserve our fire for the June campaign, when we expect to be prepared to give winter pruners a raking broadside.

This is however one of the 365 proper times in the year, to give the ground under and around fruit trees, a good top-dressing.

We have not space to enumerate the whole catalogue of substances that will prove suitable food for fruit trees.

Yes, food—anything that produces, must have food; and fruit trees are the better for a liberal supply of it. Nature supplies trees of the forest perpetually with food, and she always applies it as a top-dressing.

She annually spreads on a new stratum of undecomposed leaves, and the substratum is annually mainly reduced by decay to assimilable tree food, and this process is perpetuated so long as the forest remains.

Look at the towering old patriarchs of the forest, some of them having passed their second centennial are still vigorous and healthful, and they have had no saw or pruning hooks denuding them, and have proved that Mr. Mulch, the agent in the Nature Company, is found to be a reliable agent of life insurance. There are, it is true, many "irregularities" in that company, but there are no "defalcations," and the deaths of her dependents generally die from old age.

Apply as a top-dressing anything good for potatoes, or corn, or for wheat, and it will make good food for the fruit trees, but do as nature does, mulch the ground thoroughly and far beyond the ends of the roots, and they will "go for it."

Wood ashes, lime, a little salt, bone meal and barn yard manure all good food. If you have little to apply, do not put any near the trunk, but apply it in a circular belt two yards within, and one yard without the plumb of the longest, lateral limbs—there is where the mouths of the tree roots are, hence there is where the food should be placed. More anon.

CLOSING CRACKS IN CAST IRON STOVES.—Good wood ashes are to be sifted through a fine sieve, to which is to be added the same quantity of clay thoroughly pulverized, together with a little salt. The mixture is to be moistened with water enough to make a paste, and the crack of the stove filled with it. The cement does not peel off or break away, and assumes an extreme degree of hardness after being heated. The stove must be cool when the application is made. The same substance may be used in setting the plates of a stove, or in fitting stovepipes, serving to render all the joints perfectly tight.

Among Farmers of Virginia.

The Woodlawn Farmers' Club held its February Meeting at the fine farm of C. Lukens, on Saturday the 20th inst. Chalkley Gillingham, President, in the Chair; and N. W. Fiereson, Secretary. A large number of members were present, with some others.

An instructive communication was received from Benj. Hallowell, of Sandy Springs, Maryland, in which he strongly recommended the free use of lime and bone, in the improvement of farm land. Among other things, he said:

"Very much depends upon the *mechanical* condition of the materials that plants need, in the soil. A distinguished analytical chemist, some years ago, gave in Silliman's Journal of Science, the constituents of two soils, one from a sterile district in Connecticut, the other from the fertile Miami valley, in Ohio, and they were almost identical, the difference in the productiveness of the two soils, being the result of their *mechanical* condition, the Miami valley being exceedingly fine and loose, while that of Connecticut, was hard and compact. Nothing but *experiment* can tell what will be the effect of a manure upon any soil. When I read thy letter last evening, I was glad to find thou wast on the right track for obtaining the knowledge thou needs. It was the plan I pursued when I began to improve this farm. I had some 20 or 30 experiments a year, with different manures, in different quantities, and on different crops, and thus learned what was best for my land. I found I obtained an additional bushel of wheat for every additional bushel of ground bones. Applied from 5 to 30 bushels per acre, and at the price bones then were, 30 cents per bushel, this would pay well. I have found ground bones and Peruvian guano, mixed, the best appliative I could use for my land, and to have these *well worked in and mixed with the soil*. My farm was *very poor* when I began to improve it. The lime I put on it in that condition showed no effect whatever, while where I sowed ground bones on oats and clover, at the rate of 5 bushels to the acre, stripes could be seen across the field as far as we could see the field; where I put ground bones on corn in the hill when planted, the corn and stalks were more than treble in weight and volume; where I got my land in grass, and applied lime I found it of lasting value, and my farm has been limed about 50 bushels to the acre. * * *

I am now 75½ years old, and from this twilight of old age look back with pleasure over my past life, and over none with more gratification than my labors for the improvement of agriculture, the *basis of all industries*."

Wm. Saunders, and other careful experimenters, all agree that more depends upon the *mechanical* condition of the soil, than any other principle.

A discussion has been, for some months, maintained in this intelligent Club, as to the relative value of oyster shells, in the various conditions of burning, grinding, or dissolution, as compared to other lime, from stone.

Mr. Mason exhibited a jar containing a quantity of ground oyster shells mixed with potash in process of dissolving. Some of the mixture being put in a tumbler with water, showed a very small amount of the shells dissolved thus far. It needs more time for the development of the experiment.

The most profitable mode of Feeding Dairy Cows was considered. A member placed samples of corn-meal and hominy-chop, on the table, and asked the opinion of the club as to the relative value for feeding milch cows, the corn meal being sold at 10 cents per bushel more than the chop—not settled.

Complaint was made, by some, that cows was not giving, this season, milk proportioned to the feed; but no decisive solution was arrived at.

Col. Chamberlain, of Loudon County, recommended more attention to fruit growing, as a help to renovate the worn-out farms of Virginia.

The Critical Committee, on Mr. Luken's farm, called attention to the excellent accommodations and condition of his cows, and his stock generally.

W. Walton read a paper on rotation of crops, recommending a *root* crop, between corn and wheat, as much better for the land than so many grain crops in succession.

The next meeting of the club will be held at D. P. Smith's, March 20th, at Collingwood, Va.

The critical committee for that place are V. Baker, S. H. Snowden, and C. Ballinger.

This is one of the oldest and most enterprising Farmers' Clubs in this part of the State; and derives benefits from the association.

On Tuesday, the 23d day of February, by invitation, I visited the splendid, and highly improved fruit and dairy farm of Mr. Samuel Pullman, known as "Mount Erin," in Fairfax County, where I witnessed much that was gratifying and instructive. Mr. Pullman is one of the most enterprising and progressive farmers in the country; buys and uses all of the most improved machinery for saving labor on the farm, and adopts the best known modes of doing things. He keeps about 50 cows, feeds ground corn, and other mill feed, cut up with hay and fodder. His spring-house and ice-house are models. He is liberal in the expenditure of the money which he makes from his profitable farm, and finds his profits increase thereby.—And one of the most pleasant features of his plans and principles, is, that he aims to make the farm, home, and work so pleasant, profitable, and attractive to his children, that, as they grow up, they like their home and business, and not like too many farmer sons and daughters, have no desire to leave it, and seek places in towns and cities; this is an important consideration, by more farmer fathers.

On the evening of my visit, a large party, some 50 ladies and gentlemen, were assembled there, in a pleasant "Sewing Bee," for benefit of a church, when a bountiful supper, of rich variety, was spread and enjoyed.—at which near a score of families were represented. D. S. CURTISS.

Industrial Departments of the Government.

The Agricultural and Patent Departments at Washington, are especially the Departments of Industry in this country—the ones which particularly have charge of the interests of the great producing classes.

In a previous article, some brief statements were made of the Agricultural Department. This article presents some facts about the Patent Office, which are furnished to me by the energetic and obliging chief clerk, J. S. Grinnell, Esq., one of the subscribers of the *Maryland Farmer*.

Whole number of patents issued, including reissues and designs, during the year 1874, was 13,599; of which 13,072 were to natives of the United States; the balance to foreigners. Number of patents allowed, but not issued for what of final fee, 2,561. Number of trade marks registered, 559. Number of labels registered, 151; total, 710.

Of all the above, 218 were granted to citizens of Maryland; to Virginia, 71; to the District of Columbia, 145.

Amount of receipts during the year,	\$738,278.17
Amount in treasury, balance,	806,124.21

Total,	\$1,544,402.38
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Amount paid for salaries,	\$482,157.89
Other expenses	197,130.52

Total expenses,	\$679,288.41
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This branch of Government affairs, it will be seen, is self-sustaining, and puts money into the Treasury.

The number of patents issued is on the increase, as is seen in the fact that for the month of January, 1874, the number was, 1088; and for January, 1875, the number was, 1095.

Most of this large sum, received by the Government, for this branch of business comes out of poor inventors; and the Government, in justice to that ingenious and useful class, should make the expense as low as will cover cost, and not keep it so high as to *make money* out of them. Only a small portion of inventors make money on their inventions, while a very few get rich; speculators with the patents make the most money; being sharp traffickers, while the inventors generally are not. Hence, we believe it will be wise and just for the Government to do this business at the lowest cost that will sustain the office.

D. S. CURTISS.

HUNGARIAN GRASS.

To the Editors of the *Maryland Farmer*:

On page 69 of your issue for March, I find an article, over the signature of R. N. Pennington, commenting upon a former one of mine upon the above subject. I cannot but think that we either allude to different kinds of grass, or else our difference in latitude works a great change in its nature. With us, Hungarian Grass is very tender, and is killed by the slightest frost; except in unusually moist seasons, it never sprouts after once cut; the seed closely resembles the old fashioned millet, and we find that unless the soil is very well manured, *one bushel* per acre is too much seed; if sown at the rate of two bushels per acre, as proposed by your correspondent, it would grow but a few inches high, whereas when sown at the rate named by me, it makes a heavy growth of *fine* hay, often three feet high. His allusion to its good qualities as early and late pasturage, leads me to suppose that he alludes to Orchard grass. Our Hungarian grass has a very slight hold on the soil, and one bite by a hungry animal would pull it up by the roots where the soil was light. If sown too early in the spring, it will be killed by late frost, and if sown too late, by early ones in the fall; we would no more expect it to grow next spring (without reseeded) than oats or corn. On page 88, your correspondent, N. B. Worthington, alludes to what we call Hungarian grass, but I cannot think R. N. Pennington does. Yours,

CHESTER COUNTY, PA.

New in Working Steel.

In company with a number of the leading Architects and Mechanical and Civil Engineers of Baltimore, we visited the works of Messrs. Denmead & Co., a few days since, to witness the practical exhibition of a new process of welding cast steel, by a patented process. The patent consists in the use of caustic soda as a flux—and its efficiency was very gratifying and satisfactory to all present.

A bar of fine cast-steel, one inch square in section, was over-heated, so that a portion of the bar tumbled off as it was jarred on the anvil, when the over-heated end of the bar was inserted into the flux, and replaced upon the fractured piece, and the abutting pieces welded end to end. This welded portion of the bar was re-heated, and a cold chisel formed from it, which was tempered and severely tested. It apparently had all the properties of the bar prior to being over-heated.

It is an invaluable discovery, and is being generally introduced.

FOREIGN CORRESPONDENCE.

DIJON, FRANCE, *February 17th, 1875.*

Dear Farmer: I look forward with pleasure, and welcome gladly the sight of your blue jacket. In a strange place you come to me as one from home. Seeing my love for you, my friends have made you quite a *pet*; if I told all the compliments paid to your worth and neat attractive appearance, you might class me among the flatterers of the age, for our American people can hardly believe we have anything better at home than abroad. It is true, I am in a land where every thing is gotten up so well, with always an eye to the effective and beautiful, still they have not used any taste or care in the appearance of their agricultural journals, but they have much of interest in them, not only for France, but all the world. The principal discussion now going on in the Spanish and French Journals, is the growing of the grape vine from the seed, also, the renewal of the old vine by the incision of seed; they think by using seed, instead of the grape slips as heretofore, it will be the means of having an entire new vineyard in time, in place of the old. Vineyards, near Dijon, have vines sixty and a hundred years old, which still bear, but not well, and are the means of keeping that pest and destroyer, (the *Phylloxera*.) The raising by seed has been tried by the most experienced and learned grape growers, in both Spain and France; so far, the experiment is young, and no very great success has rewarded their efforts. Our American vineyards are too new as yet, and too few, for this subject to be of much interest; had I not thought so, I would have given the process of planting and raising the seed, as well as how to renew the old vine.

CATTLE FOOD.

The sowing of winter food for cattle can never be without interest to any farmer, but it is the subject of much thought here, as not so much land can be spared for forage and pasturage; the farmer seeks to find the most economical food at the same time healthy, and gives him the most satisfactory results in the cattle themselves. Several wealthy and noted gentlemen farmers in the north and south of France, believe they have found the best food for this purpose.

PRESERVED CORN FOR CATTLE, OR CORN PUT AWAY IN A PIT.

Have a pit dug as large as you need, that is, according to the stock you have to feed, and the crop you have to keep; if very large, it is as well to have two dug, in the shape of a cone, the big end lower; best to be walled up with brick and mortar, but the

earth walls will do, if free from the intrusion of moles, rats and such nuisances, that pull away the earth and make air holes. When dry and clear, sprinkle the floor of the pit with salt. The corn cut green and young, before the ear appears, is laid, freshly cut, in the pit, in tight, compact layers. When half up the pit, sprinkle well with salt, then fill up to the top; cover with salt lightly; then make the pit as air-tight as possible. When hard winter comes, and food is scarce, or only dry food to be had, use from your pit. If the tops and sides are black from contact with air or damp, don't throw it away, but get some from under, which will be fresh and bleached white; mix them well together, and give to the cattle; at first, they may not like it much, but soon they will look for their food out of the pit with eagerness; by using the black with the best, the cattle can have no disgust, and it has been ascertained it was as good and healthy as the lighter colored, only not so fresh and well preserved. The cattle fatten rapidly, and keep in good condition for spring. One gentleman had an old barn, he fitted it up as air-tight as possible, and packed it with the new cut corn and salt, he found it answered, but not so well as the pit. If a dry season, or from some other cause, the corn crop is not good, or you are not able to raise a second, add very coarse green grass, newly cut, mixed with the corn, and fill the pit in the manner described.

GERANIUM.

THE PRODUCTION OF RICE.—We learn from "*The Grocery and Provision Review*" that the negroes have returned to the rice fields of South Carolina, and are cultivating rice either entirely or in part on their own account, and are succeeding beyond all expectation.

According to the returns, the production of the State in 1866, was 12,618,000 pounds; in 1868 it was 22,228,200 pounds; and in 1869, 24,703,200 pounds.

But in Louisiana the progress is even more encouraging. Before the war, rice had hardly risen to the rank of a great staple in the production of that State, the crop of 1859 being put down only 6,331,257 pounds. But we find the crop of 1869 put down in commercial returns at 20,149,600 pounds, though the census makes it somewhat less. Such an increase shows how well adapted the region is to the growth of this product, and points clearly to the time, which ought not to be far distant, when we can strike it from the list of our imports.

PLATINUM BRONZE, said to be entirely unoxidizable and especially adapted to the manufacture of cooking utensils, is made of nickel 100 parts; tin 10; platinum 1.

HORTICULTURE.

MAGNOLIAS.

Most of our common trees have a certain similarity of appearance, that strikes the observer at once, and gives a sort of relationship to all of them. But the tribe of *Magnolia* has a peculiar distinctness by which any one once knowing a *Magnolia*, readily distinguishes any of them. They have a semi-tropical character of foliage, or else some peculiarity of habit that few other hardy trees possess. This comes, perhaps, from most of our hardy trees being allied to the trees of Europe, while the *Magnolia* is unknown to that part of the world.—Most of those in cultivation are of our own country, a few being natives of Asia.

Beginning with the first to flower, we have the Chinese *Magnolia*, or *Yu-Lan*. This perfects its buds in the fall of the year, and when the spring comes flowers at once. It has a very striking effect covered with its large, sweet, cup-like, white blossoms before any leaves, and before any other flowers from other plants appear. There is an Asiatic kind known as the purple flowered *Magnolia*, which also blooms a little before its leaves appear, and sometime after the Chinese white. It grows dense and bushy—is, indeed, but a large shrub.—It is much valued for small gardens. Then there is what is known as *Soulanges's Magnolia*, *M. Soulangiana*, which is a hybrid raised between the two before named, and is just intermediate in every respect. It flowers later than the first and earlier than the last, is not as white, nor yet as purple, is not as tree like, nor so much of a shrub, and partakes of the foliaceous characters of both.

Of our American species, the best known, perhaps, is the *Swamp Laurel*, which abounds in damp places all through our and neighboring States. It is the *Magnolia glauca*; and though naturally found in moist places, grows very well in any ordinary garden ground.

The next best known is probably *Magnolia tripetala*, which makes a tree as large as an apple tree, and is valued for its peculiar leaves, which in general character are not unlike small banana leaves. It has large white, rather loose flowers, and the seeds which follow are in large purplish cones, which are more handsome than the flowers.

The *Magnolia Grandiflora*, is essentially the *Magnolia* of the South. Its large shining evergreen leaves would give it a claim on any over-attention, even had it no flowers of consequence;

but, when to this is added its large, creamy, white, sweet-scented flowers, it has a double charm. It has been the fashion in some countries to have representative flowers. Thus France has the the *Violet*; Germany the *Iris*; England the *Rose*; Ireland the *Shamrock*; Scotland the *Thistle*; America has never been thus signalized. The time may come when she will indulge in this fancy. Then let it be the *MAGNOLIA GRANDIFLORA*.

The *Cucumber Magnolia*, *M. acuminata*, is very common in the *Shenandoah Mountains*, and as a tree for ornamenting grounds, especially large parks, there are few things superior to it. It grows out so regularly, that every one is struck by its beauty of form. The flowers are of a milky white—the books call it blue—that is blue or skimmed milk. It is not likely to be appreciated much on this account, but its scarlet seed vessels are very attractive. In favorable locations it will grow nearly as large as the tulip tree.

Besides there are two which one meets with now and then in the *Cumberland Mountains*, but which do not seem to have got into general cultivation. One is the ear leaved *Magnolia*, and the other the large leaved, *M. macrophylla*, but both we think worthy of culture.

THE APRICOT.

People often talk about the profits that would result, if only the Plum could be grown certainly and safely against the Curculio and the Plum Knot; but this is even more true of the Apricot, which, when well grown, is one of the most delicious of all fruits. Those who have traveled in Europe, tell us, that of all stone fruits, this is the most valued by fruit epicures, and that the greatest care is devoted to their culture, by training them carefully on walls, and protecting them by nets and otherwise from insects and from birds. Some years ago, the apricot was cultivated with considerable success in some parts of Maryland, but the varieties used were probably small, as the fruit were not larger than ordinary plums, and nothing extra. The improved varieties of which Europeans boast are said to be as large as an average sized peach; and the flesh, instead of being firm and solid, as our old time friends were, is so soft and rich as to melt like honey in the mouth. By all accounts, they have these large kinds in the Pacific States, as those who have been there speak as highly of them as Europeans do of theirs.

The Apricot is free from many of the diseases which infest the plum and the peach. So far as we know it escapes the Plum Knot, and the Yellows, which, in many districts, almost entirely prevents successful peach culture, leaves this kind of fruit entirely alone. Indeed, we know of nothing but the Curculio that is troublesome to the apricot, and it may be worth while to consider whether it would not pay to train as few apricot trees in some manner so that they could be conveniently covered with cheap gauze during the season of danger.—The fruit, that is of the best kinds, not being so firm as that of the peach, will not travel long distances so well, and this is an advantage in this that there would not be a severe competition which so often over stocks the market and breaks down prices. Those who live near large centres of population, if they could successfully grow this fruit would have all the trade in their own hands. We think it would be well worth while for those who have the opportunity to try with a few trees what could be done, and if found a success, as we think it would, it could be extended to any degree desirable.

PRUNING TRANSPLANTED GRAPES.

In selecting grape vines, it is often the endeavor to get them as large as possible. This is all very well so far as good strong plants are concerned; but it is a mistake to plant these large, strong vines without trimming them considerably. It is hard when one has a well grown vine of several feet in length, to be told that it is best to cut it back; and it requires considerable nerve to take such advice; but it is the experience of the most successful planters, that it is best to do so. This is more especially the case if the roots are not very numerous, as is likely to be particularly with plants raised from layers. These are very deceptive.—The tops usually look particularly nice, as they had the whole system of roots of the original vine to support them. But after being cut from the parent vine, they are left with but a few threads that have been thrown out while the branch was bent down as a layer in the ground. Such strong vines, but comparatively rootless vines are more benefited by cutting back than any. In some cases the vines will be planted without any cutting back, and in the warmer regions where our magazine reaches, will be pushing into leaf—and the question arises, is it well to prune now? It may have been better to have it pruned when first planted, but now that the leaves are pushing, what shall be done? In these cases, it is the universal experience, that if the vine is left to take its own

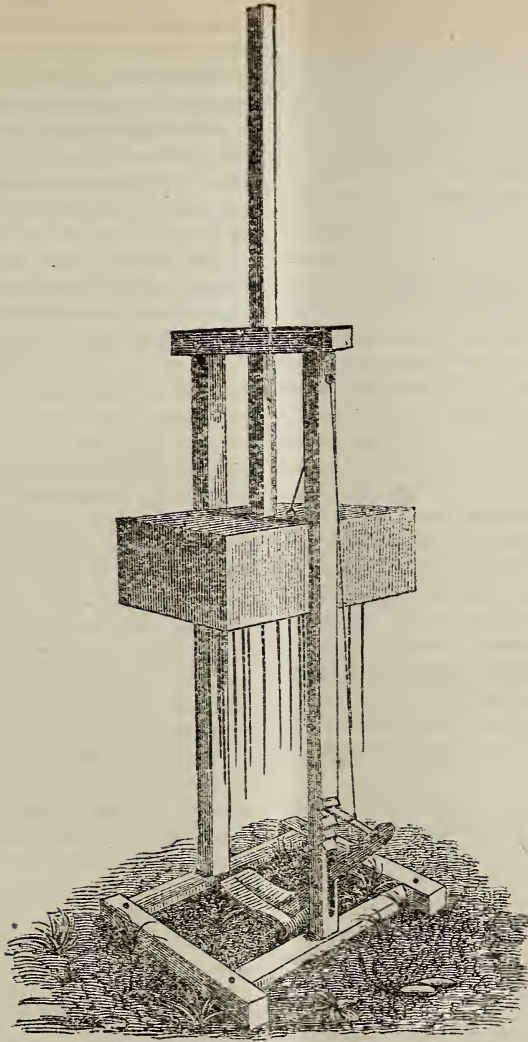
course, each pushing bud will make but a weak growth, none of which will be strong enough to bear fruit the next year; but if these can be thinned out, the few that are left will get the nutriment which would have been scattered over the whole, and we then get a few good growths instead of a large lot of useless ones. The best plan, therefore, is to thin out the buds, leaving only those to grow that look the most vigorous and life-like. This is nearly as good as a trimming at transplanting.

THREE GOOD PEARS.

Every one who expects to plant pears, knows at once, that he must have a Bartlett and Seckel. Every body agrees on this, but after that comes a difference of opinion. Our own selection of three good pears after this, would be Lawrence, Howell and Beurre d' Anjou. The Lawrence is by all odds the best winter pair we have. The tree is not quite as vigorous a grower as some others, but it is very clean and healthy, and the fruit generally ripens with ordinary care and trouble—while so many winter pears require a special knowledge as to treatment that few fruit growers, as a general thing possess. The Beurre d' Anjou, does not keep so long as the Lawrence, but when the tree is grown in a cool situation, and the leaves do not drop early, and the fruit consequently comes to its best perfection, we have known them, in cool cellars, keep in excellent condition till February.—For profit, it has the excellent recommendation of coming into good bearing on comparatively young trees, so that one has not to wait a quarter of his lifetime to get good returns from the plantation. The quality is not quite as good as a first-class Lawrence, though in its highest condition, it is little inferior.

But for real profit, probably few will out-do the Howell. It is over before either of the other two, but is a charming grower, always in health, and will often commence to bear the second year from grafting, continuing to increase annually in the quantity produced in a regular manner, and not by fits and starts, as so many kinds do. It is not in our opinion, as good a Pear, in flavor, as either of the other two, but good enough to suit all but the most fastidious. The former two Pears, are of the pear-shaped class of fruits—this is of the round class, and, though not as large as some kinds grow, may yet be classed among the large kinds.

In addition to these notes, which we make from our own observations, the remarks made on some others, by Captain Snow, before our Horticultural Society, will furnish valuable hints as to others likely to prove well adapted to orchard culture in Maryland.



MOLES.

In lawns and gardens moles are very destructive. It is not what they eat so much as what they destroy by burrowing under the ground in every direction. Indeed, it is argued by some, that they never eat vegetable, but live only on animal food, and that this food consists of the most destructive insects. They contend that on this score the mole is much more of a benefit than an injury. Our own opinion is, that the mole does sometimes eat vegetable matter, though, perhaps, the field mice are really chargeable to most that is laid to its

door. Still, if we find no harm from any of these so-called injurious insects, and do find harm from the mole, we are very apt to look for measures of mole destruction. This is how it is on our lawns. We have no insect that disturbs us here; but the upheaval by moles must not be tolerated. There are said to be ways of driving them away, and, if so, this will be the best compromise for those to follow who have not made up their minds whether the mole is to them more injurious than beneficial. A contemporary says, that smoked fish put into their holes drives them away; or rags dipped in gas tar will have the same effect. The other class will

want to destroy them, and for these there are various traps on sale at the agricultural seed stores. They who are not near these, however, can make traps for themselves; one of the easiest to make is, perhaps, the Belgian trap, of which we give an illustration herewith. Its construction can be readily perceived by the cut. It is made wholly of wood, except the sharp wires in the heavy falling block, and is set by a tongue as in any ordinary trap, which the mole displaces while boring the hole beneath.

Grafts and Plants by Mail.

It is not yet as generally known to the community as it might be, that small plants and flowers can go safely through the mail hundreds of miles, though most people now know that seeds travel that way. In our advertising columns are frequent notices of this plan of sending, and the advertisers tell us that they give as good satisfaction as when sent in the old and slow and bulky ways of transportation. Of course, much smaller plants have to be used, but if well rooted and otherwise well-established, they do as well as larger plants.—Plants have to be small, because the parcels are limited by law to four lbs. A florist told us recently that he sent a hundred plants of the Smilax, now so popular in the East for boquet making, three hundred miles by mail, at a cost of only thirty cents. The rate of postage is about ten cents per lb.

Many of our readers could send presents of any thing they may have duplicates of to distant friends in this way, if they would only think of it; and thus create a taste for fruit and flower culture in out of the way places, where such good taste is hardly known. It is necessary to keep the plants or cuttings from rotting, on the one extreme, or getting too dry on the other. If the plants are of a rather succulent nature, such as Geraniums, Fuchsias, or the like, it is best to pack rather dryer than for other things, and, also, to pick off most of the leaves, as it is the soft cellular leaves which rot first. Oil paper is best to wrap around the plants, as it prevents evaporation, having previously enveloped them in moss, more or less damp, according to the nature of the plant as before referred to. The package must not be sealed or gummed down, or this will subject it to letter postage, of six cents per ounce. This regulation is to permit of the opening of the packages by the Post Office clerks, if they desire to examine contents, so as to ascertain if there is any writing inside; and this also subjects the package to letter postage.

Rage has been spoken of as mental imbecility.

LAWNS.

The most beautiful feature of a garden is the summer lawn. In our warm climate, it is one of the most difficult of all things to accomplish. Further north, white clover is relied on as an element in thickening the grass, but with us white clover burns out sooner than the real grasses. So far, we believe, the blue grass alone, unmixed with any thing else, will make the lawn the best suited to our wants.

Much of the green color of a lawn in hot weather, is due to good food, and hence, where it can be done, it is a good plan to top-dress the grass every season. For this purpose, special fertilizers, of various kinds, are better than manure from stables or any such composts, as these introduce various weeds which soon spoil the smooth character of a lawn. Of these fertilizers, wood ashes are excellent, where they can be obtained; but in their absence, guano, or even common salt, will do well. It is also a good plan in the early spring to roll frequently, as this makes a nice, level, smooth sward. Where the lawn mower is used, it is enough to roll with a heavy roller once—and the rest of the year the roller of the mowing machine will do all that is required.

In mowing with a machine, it appears to be the testimony of those with a large experience, that we cut too close for our hot dry seasons. Many in mowing will set the knives so that they go within a quarter of an inch of the ground. A half an inch is much better, and, perhaps, in some cases, it may be best to leave three-quarters or even an inch stand. Experience will be the best teacher—the rule being that where there is a danger of burning, give more manure, and cut longer. That is, do not set the knives so close to the ground.

TRAP FOR CUT-WORMS.—The American Agriculturist gives the following:—An old shovel handle is split for about a foot with a fine saw. The split portion is soaked in boiling water to soften it, and the ends are inserted into holes made in a hoop or ring of wood, two inches wide, one inch thick and eight inches in diameter. In the bottom of the ring there are inserted a number of pieces of an old broom-handle, projecting two inches and not more than a quarter of an inch apart. When this is pressed into the earth, around a hill of corn or a cabbage plant, it leaves a circle of smooth round holes, two inches deep, with compact sides and bottoms. The cut-worms fall into these holes in their nightly rambles, and may be found and destroyed in the morning.

Silence is the fittest reply to folly.

FRUIT PROSPECTS—MAY DAY.

People are wondering what is the prospect for a good supply of fruit the coming season.

The probability is that the cool, backward season will keep the buds and bloom back so late that there will be no danger from Jackfrost or severe weather when they do spring and sprout forth; and that the fruit and foliage can grow on all the more vigorously when they do start, and thus be the better able to resist enemies or other disaster that may attack; so, we will hope for a good fruit crop the coming season, if the trees and vines have had the proper care and treatment the past fall and winter, and are not allowed to carry too heavy a crop, but are reasonably thinned out in the spring.

And the young people are wishing to know what kind of a *May Day* they will have for the vernal and floral festivities. O, yes, that is pleasant to think of—the writer remembers twenty or thirty years ago, when he was a pioneer to Michigan, the then “Way out West;” the new settlers would walk and ride half a dozen miles or more to meet a few other new settlers for a *May Day* frolic; and to select from the number of good and nice country girls, the one that was distinguished for goodness, kindness, and sprightliness, to be crowned the Queen of the company and settlement; and there was no difficulty in finding a truly worthy candidate for the regal honors. To be sure, at that early season wild flowers were scarce but some were always found and suitably appropriated.

But the new Gregorian Calendar, or regulation of time, robs us of much of the pleasure which originally belonged to that festal day of pleasure to the rural people.

The old or Julian year, established nearly half a century before the birth of our Savior, by Julius Cæsar, placed the first of May nearly half a month (eleven days) later than it is now under the new style; that many days being taken off of the last end of October, by Decree of Pope Gregory, in the year 1582; then adopted in Great Britain 1752; and then brought to this country by the colonies. Very pleasant, wasn't it, for the people on that 20th of October to wake up and find they had slept until the first of November—a good long nap, almost as long as the sleep of Rip Van Winkle.

But we recommend the young people to vote and ordain that the 16th of May shall be *May Day*; it is exactly the middle of the month, there being 31 days in May.

At the time and season there will be much greater profusion of flowers; the weather will be more pleasant for field sports. And altogether the time will be more propitious, particularly, if they

have to do as settlers on the frontiers were compelled to do; there being very few roads, and fewer carriages, blankets or pillows were placed on the horses, behind the saddles, when the lads were mounted, and the lasses rode behind, all safe and jolly.

D. S. C.

POTOMAC FRUIT GROWERS.

MARCH SESSION—1875.

This old and useful Society, met at the Board of Trade Rooms, of Hon. Wm. H. Clagett, one of the most reliable business men of Washington, who has for several years granted the free use of his place for these meetings.

Chalkley Gillingham, President, in the chair, and J. E. Snodgrass, secretary. A goodly number of members and visitors were present, and interesting papers were read. After reading of the minutes three new members were elected.

APPLES, AND APPLE CULTURE.

Maj. H. C. Williams, an old fruit grower, had been designated to read a paper on the apple; but from ill health was unable to attend, and sent an interesting paper, which was read by the Secretary; he also sent some fine specimens of the Tewksbury winter blush apples, sound and crisp. Among other useful hints, in Maj. Williams paper, he said:

“As for our present fruit productions, I think they are not more than one-tenth of what they should be. Were it asked of me, ‘If we produced ten times the apples we now do, what could we do with them?’ My answer would be, make more use of them in the family than most farmers now do; sell as many as can be got to market and sold; make cider and vinegar out of the unmarketable ones, or feed them to your stock. For feed to domestic animals, apples are not fully appreciated.—If you have not found a sale for the better varieties ship them to England, where there is, I am told, always a good market for American apples.

I will now give you a list of twelve of the most profitable varieties which I have cultivated, and a list also of those which I think may be introduced and cultivated with hopes of success. I confine myself to a dozen of the first and expect other members do the same. No doubt by the time all the favorites are mentioned, we shall have a large catalogue. I know no better way than this, to ascertain the average of opinions, as I may term it, of those who have made apple culture their study and practice.

Varieties for general culture.—1. Early Harvest; 2. Maiden's Blush; 3. Summer Queen; 4. Wetherell's White Sweet; 5. Smokehouse; 6. Hagloe; 7. Bullock's Pippin; 8. Milam; 9. Smith's Cider; 10. Winesap Cider; 11. Genet; 12. Tewkesbury Winter.

Most of the following I have not yet fruited, but I have planted them under a conviction that they will be suitable for extensive cultivation. I recommend them for trial; 1. Ben Davis; 2. Cannon Pearmain; 3. Equinately; 4. Hall; 5. Matamasket; 6. Nichijack; 7. Shockley; 8. Settle Pippin, (variously called Adam's White, Hox's White, and, according to Mr. Saul, Superb White;) 9. Wheatyard or Broadwater, (a local variety;) 10. Grind-

stone; 11. French Pippin, (old variety); 12. James River of Maryland orchardists."

The President also read an instructive paper, in which he said:

"There are two kinds of apple orchards, viz: the amateur and the commercial. I will give a list of what in my opinion constitutes both. First is the amateur, or general orchard, for family use, of 100 trees for the climate of Eastern Virginia—Astrachan Red, 5; Summer Rose, 5; Early Harvest, 5; Edwards Early, 5; Summer Pearmain, 5; Porter, 3; Jersey Sweet, 3; Maiden's Blush, 5; Smokehouse, 5; Belmont, 4; Peck's Pleasant, 3; Paradise (winter), 3; Russett (American Golden), 4; Roman Stem, 4; Milam, 3; Adam's White, 3; Prior's Red, 3; Rawles' Genet, 3; Shockley, 3; Nick-a-jack, 3; White Sap, 6; Winter Cheese, 5; Abram, 3; Smith's Cider, 3; York Imperial, 4.

The commercial orchard cannot be accurately designated, and a proper list prepared for it, without first knowing the location of the individual needing it, his distance from market, the kind of soil whereon he intends putting it. If he is near enough to market to avail himself of the benefit of the early sorts, he should do this; he would not then come in competition with the northern influx of that fruit. But if he is distant therefrom, and has to send by railroad, he has to content himself with propagating late varieties only."

Mr. D. O. Munson, the popular nurseryman, was asked what varieties of apples he would recommend, gave the following list:

"Early Harvest, Red Astrachan, Jersey Sweet, Maiden's Blush, Sour Bough, Fall Pippin, Gloucester White, Ben Davis, Albemarle Pippin, Romanite, Roman Stem, Smokehouse, Summer Pearmain, Bonuai, Lowell, Wine Apple, Smith's Cider, Limber Twig, Rawles' Jenet, Wine' Sap, Tewksbury Winter Blush, American Golden Russett, Sweet Winter, Paradise and York Imperial."

Judge Gray recommended the Lady Apple, and some others, especially the Jersey Sweet, saying, in referring to the usefulness of certain apples as food for cattle and hogs, there was one apple which he thought Major Williams might have added to his list. It was known as the Jersey Sweet. For hogs, especially, it was very beneficial, and suited the Association's field of inquiry. In his opinion, the President did not give the Winesap the prominence it deserved. For himself, of an hundred trees, if he were setting a new orchard, he would plant seventy-five Winesaps.

The Secretary said his observation in this section brought him to the conclusion, that other things equal, the disappearance of the forests, the result of the war, had more to do with the general complaints he had listened to of failures, here and there, of orchards, than any other cause.

Col. Hiram Pitts confirmed the views of the Secretary, with some interesting statements of experience of Mr. Dunlap, in Illinois, where skirts of woodland, when found, were availed of for orchards. One man who planted his orchard in a place surrounded by forest on three sides—all but the east—was laughed at by his neighbors. "But when bearing time came the laugh was turned on those who selected the open prairie, his dark "Notch" orchard out-yielding them all. Dunlap was the name of the supposed "fool," who turned out to be the wisest of them all. As to grass, he,

(Colonel Pitts) was opposed to it in orchards.—Better make a hog pasture of your orchard. He had in his mind a New York orchard, that was so used and bore for eighty years. Hogs will dig out and destroy the grubs and other worms, and root the ground over, and destroy roots and weeds.

Stacy H. Snowden, of Virginia, exhibited several varieties of well-kept apples. One of these was labeled "spice." To this name the President and others objected, as too local and undistinguishable a name. It would more probably be called "pearmain."

Wm. H. Chase, Esq., wanted to know if the grass condemnation applied to pears as well as apples. He asked because Mr. Sanders advised him to sow strips of grass in the middle of the rows of his pear orchard, near Accotink, which is the practice by Mr. S. in the Government garden with pears, and they bore beautifully.

The President.—Grass is only allowable to check growth of wood, and increase the quality of fruit.

John J. Henry, D. C., thought, in the light of his experience, when growing in Delaware, grass should be kept away from a young growing orchard. After the trees matured and were bearing, grass and even corn could be cultivated therein safely.

The fine fruits on the table were now tasted, and adjudged first rate, crisp and juicy for this time of the year.

Major King read a paper on the quince, which was ordered on file and printed with the minutes.

Colonel Curtiss here gave an interesting account of the last meeting of the Maryland Horticultural Society, at Baltimore. He received a cordial welcome as a casual representative of the Potomac Fruit Growers' Association. He felt authorized to say, that that Society would be glad to see any of the members at the next meeting, which would take place on the third Thursday in March. The February Meeting was a great success.

The President announced as the subject for discussion at the next meeting, the culture and varieties of the

PEAR,

and designated Col. Hiram Pitts to open the subject with a paper, which he will do. The pear is a fruit deserving of more attention than it now receives in this section.

The Secretary said more care and watchfulness was needed—better attention to trees and soil—to secure uniform good crops of fruits.

D. O. Munson thought careful selection, proper adaptation and thorough culture would succeed.

On motion, adjourned till the first Tuesday in April next, when the Society will be glad to see as many of the public present as may desire to come.

Mr. Munson gave us the names of two new peaches—the Alexander and Amsden's June—which he is cultivating, said to be the earliest known. D. S. C.

LEMON JUICE IN DIPHTHERIA.—Dr. Revillout states that lemon juice, used as a gargle, is an efficacious specific against diphtheria and similar throat troubles. He has successfully thus employed it for over eighteen years,

For the "Maryland Farmer."

Begonias Grown for Bloom.

Many articles have been written, in the leading Horticultural Periodicals, in praise and of the treatment of most of our favorite greenhouse flowers, but little has been said of the beautiful, graceful, flowering class of Begonias; I term them flowering class, to distinguish them from those grown for their beautiful foliage; both kinds are familiar to most amateurs, and gardeners. In my estimation the ever blooming Begonia, as it really should be termed, stands pre-eminent among greenhouse or window plants—on account of its easy culture and adaptability to any temperature, although semi-exotic, from 45 to 85 degrees Far.; but it thrives best at about 55 degrees. I will mention a few varieties in which I have become particularly interested; also an approved method of cultivation. First on the list is *B. semperflorens Sandersii*, introduced by Mr. Saunders, of Washington, and undoubtedly one of the best acquisitions to modern floriculture; is of very free growth and from a cutting up is never without its scarlet wax-like flowers, ready to burst in bloom, when they obtain a bright pink. I have one plant in a sixteen inch pot which has had never less than fifty pendent full flower stems, at one time, for the past twelve months.—This variety does splendidly out doors, planted in rockwork, and exposed to the full rays of the sun, but must be well watered.

B. Hybrida multiflora, an erect, robust grower, with delicate pink flowers hanging from a thread-like stem, very choice, and showy, and by good treatment and liberal pot room is ever blooming.

B. Fuchsioidea, a beautiful erect grower, with scarlet bloom, somewhat similar in shape to *B. multiflora*, but not quite so free flowering.

B. Alba loccenia, a stout dwarf growing variety with white bloom.

B. Gaueophyllum scandens, is rather a new variety of good habit and fine scarlet flowers.

B. Weltonensis, a very beautiful pink variety, which bloom freely from May to Christmas; should not be out of any greenhouse collection, although like many other varieties needs some rest. There are numerous others very beautiful; several varieties are bulbous rooted, and ordinarily treated only bloom for a few weeks, but if the bulbs are started in succession, as any other bulbs may be, for instance Hyacinths, &c., a constant bloom can be obtained without comparatively any trouble. As a window plant, the Begonia stands second to none, as it adapts itself without inconvenience to sunshine or shade. In midsummer they seem to do best in an eastern aspect, but will also do well exposed to the full rays of the meridian sun. Most

every one who passed that way, could not but admire the beautiful specimen covered with waxey white flowers for several months last summer, in a drug store, north window, on the south side Baltimore street near Green. I believe the sun's rays never penetrates that side.

The Begonia likes a rich rather light soil. Say two parts good loam, one part rotten manure, one-half part sand, one-half part leaf soil.

Occasional watering with liquid manure is beneficial when they have filled the pot with roots. I favor liberal pot room and thorough drainage.

All the leading varieties can be purchased of the Baltimore Florists. C. W. HALL.

Cause of the Grape Vine Bleeding—And Hints on Pruning.

To the Editors of the Maryland Farmer :

There is a great difference of opinion in regard to the bleeding of the grape vine, some holding that it is caused by pruning at the wrong season. We do not think pruning has much to do with it, that is, if that operation is performed before the vine is put into a vegetating state. But if the vine is overtaken by the frost before it drops its foliage and is assisted in doing so by that agency—prune when you will the vines will most likely bleed.—Or, if the mildew has established itself it will prevent them from reaching that point of maturity which gives the wood a bright and glossy appearance, and leaves it in a soft and spungy state, which will prevent them from healing after the operation of pruning has been performed, and consequently must bleed when the vines become excited. But still, we would recommend the pruning to be done as early as possible, as there is nothing gained by delay, and that operation should be performed with a sharp knife, and the cut made in a slanting direction, an inch and a half from the eye intended to start. The manner in which vines ought to be pruned we do not think of so much consequence to the production of superior crops as some other circumstances. The food with which they are fed, whether from the border in which they are planted, or from the atmosphere in which they breath. If these two points are properly managed the vine will be found to produce abundant crops under a variety of methods of pruning. To have a sufficient supply of bearing wood is the object aimed at by every cultivator of the grape, and that method which is adapted to this effect, is the best. Some are advocates for long pruning, laying in shoots of great length—others practice the short spur system the whole length, not exceeding but one, two or three joints. But the vine is of that accommodating nature that it is capable of being trained and pruned in any way the fancy may suggest. So, to recommend any particular style of pruning is entirely out of place at this advanced state of horticulture.

W. LINEKER.

CORN AND ITS CULTIVATION.

Taking all things into consideration, the corn crop is the most important staple crop of this or any other country. It is the bread, and produces the meat for nine-tenths of our entire population, besides a large amount exported to aid in keeping down the balance of trade between the United States and Europe. Immense quantities are by distillation converted into the popular drink of America. Among the four millions of people engaged in agriculture, but few are found in any part of our expansive domain who do not to a greater or less extent cultivate this valuable and indispensable plant food. There are not less than 1,200,000,000 of bushels of corn grown per annum in this country.

Indian Corn, or Maize, is purely a plant, or grass, indigenous to the Western Hemisphere. It is suited to all the climes of America, growing under the burning suns of the South and in the cold regions of the North, and in the highest luxuriance from the Atlantic slope of the Middle States to the Pacific Ocean. Its uses are innumerable. The green or cured stalks and blades are the best of food for all kinds of stock; the grain in an unripe condition is a delicious vegetable, and when ripe may be cooked in a hundred ways to make palatable, nutritious and healthful food for man and beast.

Now, notwithstanding all these facts, our corn growers, almost without exception, have done nothing to increase the productiveness of this plant, but year after year, plant the same seed and cultivate in the same slovenly way that was pursued by our forefathers a hundred years ago, relying on the natural efforts of the soil and the sturdy energies of the corn of itself to grow and bear grain.

We think it not an under-estimate to place the present average product in the Middle and Northern States at not over *four* barrels or twenty bushels per acre, except on the new and fertile lands of some Western States, in the blue-grass region of Kentucky and a few favored sections of limited extent in the Middle States. Yet by proper culture 200 bushels, as has been accomplished, might be grown; certainly, with but a little more labor and a small outlay in money, the average crop of the country could be doubled or trebled, at the same time the land on which it grew would have increased in fertility to insure a better small grain crop and a good stand of grass.

MODE OF CULTURE.

We have found from our own experience and that of others who have grown heavy crops, that the best method of corn culture is as follows:—

Breach the land up at least six inches with a sub-soil plow in every third row. Give a heavy manuring, of stable or barn-yard manure, say 20 or 30 cart or wagon loads per acre, then 200 or 300 lbs. of bone dust or ashes, and harrow thoroughly. Soak the seed in copperas or saltpetre solution, strong. Twenty four or forty eight hours in the brine, take it out, drain and rub dry in plaster of paris, or ashes. Put it three inches in the ground. Work it every week with Thomas Smoothing Harrow until it gets a foot high, then thin it, so as to stand 18 inches in the drill, the drills three feet apart, so the plants will be 18 by 36 inches distant.

When a foot high, give a good plowing with the iron shovel plow, throwing the earth to the corn. Continue this for three weeks and then have the ground leveled by a good cultivator. Then leave the field in the hands of nature and you will in a large majority of years get from 10 to 20 barrels of corn per acre, and have your land in nice order for a wheat crop and good stand of clover.

Let us advise you, either at planting or afterwards, to drop a spoonful of salt and plaster intimately mixed, on every hill of corn; or sow it in the drill. This can be done easily if you use one of the improved drills.

This salt and plaster will keep off the worm which often kills half the corn crop, and will start the young plants with an energetic life action that makes the observer wonder why that corn grows so fast and looks so green.

National Butter and Egg Association.

We extract from a report of the annual meeting of this association, held the 10th and 11th of March, in Chicago, from "*The Grocery and Provision Review*."

The butter crop of the United States is now greater in value than either the wheat or provision crop; and by making these facts public, it is sought to have the trade assume a position in relation to the other trades that has not heretofore been accorded to it. The President of the Association has offered prizes, amounting to \$1,000, for essays on the subject of butter-making, which offer has met with a prompt response from all parts of the Union and Canada. The awards have been made and paid, and now the large number of essays thus secured are to be used in the preparation of the first and only valuable work ever published on this subject. Similar offers are to be made from time to time by the association, and the information thus obtained will be given gratuitously to the world.

The officers of the association are: President, D. W. Dake, Beloit, Wisconsin; Treasurer, Robert Langsdale, Indianapolis, Indiana; Secretary, E. P. Wells, Milwaukee, Wisconsin; Vice-President, James Anderson, New York.

For the Maryland Farmer.

Visit to Experimental Farm of Chester Co., Pennsylvania.

BY D. Z. EVANS, JR.

At the January Meeting of the Experimental Farmers' Club, held on the Experimental Farm Grounds, near West Grove, Chester County, Pa., I had the pleasure of being present, and gleaned many things of value, but, not being a very good short-hand reporter, I missed quite a number of things. The meeting being the first yearly meeting, many things had to be attended to outside of discussing interesting farm and kindred subjects. The main subject for discussion was, "The Stomach of the Ox," which had consumed much time in investigation, though many points were still left open to conjecture.

The subject was first brought to the attention of this Club by, I believe, Mr. Thomas M. Harvey, of West Grove, Chester County, Pa., having a valuable Channel Island cow die by *impaction of the manyplus*. Two of his animals were affected at nearly the same time, but one, being but slightly affected, was soon cured by ordinary remedies, such as feeding on wet food, and paying particular attention to care and shelter. All known remedies failed with the cow which eventually died, no then known remedy doing her the least good; or was there anything given which seemed to reach the affected part, though, subsequently, it was heard that a neighbor had cured two animals which were nearly dead with the disease, by giving them doses of common coal oil.

Doses of different kinds were given to the affected animal, besides fluids of certain kinds were injected, but to no perceptible good. An M. D., as well as a skillful veterinary surgeon, declared their inability to relieve or cure the animal, nor did they recognize the disease, the latter being due to the careful research and thorough practical knowledge of Mr. Harvey, who soon found out the name and nature of the disease in question.

After the animal had expired, a post-mortem examination was held, which showed the food in the *manyplus* to have been impacted so as to become impassable. The substance had become so hard and dry in the folds of the stomach, as to readily burn when fire was applied. The examination resulted in appointing a committee to examine and report on the "Stomach of the Ox." Mr. Warren Shellmeyer and Mr. Thomas J. Edge, were the men appointed, and did the duty assigned them in as satisfactory a manner as could have been done by any other persons with equal facilities. Mr. Shell-

meyer made an excellent sheet of drawings of the stomach, in different positions, and, in his absence, the task of explanation devolved upon Mr. Thos. J. Edge.

The experiment was as follows: An ox intended for slaughter was deprived of food for eighteen hours, when it was fed with corn fodder with wet food, after which corn and oats, whole, followed, and then two quarts of strong blue water. All this was done to determine where the coarse as well as the fine food went to, and, also, if the water went into the first stomach or into one of the others. Owing to the blue being a vegetable coloring, the gastric juices of the stomach neutralized the coloring matter, so its presence could not be detected in any of the stomachs. Had the coloring been a mineral instead of a vegetable dye, no doubt the result would have been different. Further investigations are going on to satisfy the members on the points where they are yet in the dark. No oats and corn were found in the first stomach, having evidently passed directly down to where the remasticated food goes. It was found that the coarse food, as first given, goes first to the first stomach, and, after it becomes mixed with gastric juices, either here or in the second stomach, (perhaps in both,) it goes to the second stomach, after which it is forced up to be remasticated, and then passed to the third stomach, to be digested and assimilated. The water was found in the first and second stomachs.

Another experiment was instituted, by a Mr. Jefferies. He took an animal he had intended to slaughter, and fed her (or him) liberally on corn meal. After it had stood some twenty or thirty minutes, it was slaughtered, and the stomachs were examined; the meal being found in the fourth stomach, which shows conclusively that it is not best to feed meal alone to obtain the best results, for much of it necessarily passes from the animal undigested, whereas, if fed with or on cut hay or food, it would go with it into the first and second stomachs, and get the proper admixture of gastric juices before being carried into the other stomachs for digestion. Any person who doubts this can readily and unexpensively try the experiment.—Let him feed some whole corn to an animal, and see if quite a percentage is not passed out along with the excrement. Corn or other grain is too expensive to make manure of, and it is far better to feed on cut fodder than to stand the loss which will always follow the other system (?) of feeding. The loss may be but comparatively small with one or two animals, but, where from five to fifty are kept, the loss is correspondingly greater and quite an item. Farming is not unprofitable because we

do not get a fair and even a good price for our produce or stock, but for the simple reason that it costs so much to produce it,—because we allow the many small leaks steal away the percentage of gain which should be our profits, and would be under a better system of management. We are all liable to err as well as slow to adopt new measures when seemingly of such little value; but farming and stock raising must now be carried on as carefully as a mercantile business, with a strict regard for economy in all its details, otherwise the many small omissions or extravagances will stagger us with the aggregate amount they present to us.

Further experiments, in regards to the workings and arrangements of the stomach of the ox, are, now going on, and if it be my good fortune to obtain the results, I will take pleasure in communicating them, for the benefit of other stock growers.

While at the Club Meeting, I saw some very fine stock, especially at Mr. Thomas M. Harvey's place, while enjoying his hospitality. At the "Farm," I saw the Jersey bull "Bertrand," from Chas. Sharpless' stock. He is an excellent animal. He was dropped 1 mo. 9th, 1872, his dam being imported Bertie, H. R., 1471, Sire Lancaster, H. R. 149. Lancaster was out of imported Blue Bell. Some persons have said that the Jersey does not breed for many years, yet the Jersey cows, Europa and Betsey Baker proved otherwise, for one bred regularly for sixteen years, and the other for eighteen years.

Mr. Harvey's stock is well worth seeing. His place is but a short walk from the "Ex. Farm," which he sold to the Agricultural College for experimental purposes. For several years he acted as superintendent, but resigned that important position several years ago, much to the regret of all concerned.

Mr. Harvey's herd consists of some magnificent Guernsey, Jersey and Alderney cattle, some seventy-five or eighty in number. His stock of English Yorkshire and improved Berkshire swine, as well as his Dark Brahma chicks, cannot be excelled, perhaps not equalled, in this country.

AMONG the pleasant Dining Saloons, in Washington, is the one kept by Walter Evans, one of your subscribers, where you will find it comfortable to call, when you come to the capital city, it is near the Post Office and the Patent Office, in Eighth Street—handy for business in those Departments.

D. S. C.

The *Rose*—how lovely when decked with dew pearls, set by the faultless hand of Nature.

For the Maryland Farmer.

Improvement of Worn-out Land.

As promised, I desire to give the readers of your valuable journal, my practical experience in the improvement of worn out lands in Maryland as well as Pennsylvania.

Although I am a dealer in manufactured fertilizers, having a large trade, but the fact presses upon my mind, being identified with the interest of the farmer, that lime and clover properly applied, is after all by far the most economical; true, you must have phosphate, bone, &c. on poor land, for the first and second crops, to produce grass or clover, for the lime to act upon. Take a sedge field, in the fall, break it up and sow in oats and clover, in the spring, sow or drill 200 lbs. phosphate to the acre; in September following, put on from 40 to 50 bushels quick lime to the acre. The next June, when the clover is in blossom, put a chain on your plow and turn the clover well under, turning up a little of the sub-soil, and put in wheat and grass in the fall, without any phosphate—a light coat of barn yard manure, if you can get it—and you may expect ample returns.—Then cut the grass and pasture for the next three years, with an additional 50 bushels of lime to the acre, the second year, as a top dressing, so that when you follow with corn, it will produce from 10 to 12 barrels of corn per acre, where it would not have produced 2 barrels per acre at first. This has been my experience—now count the cost between this mode and the present, which is but little lime and grass, and fertilizers upon every crop—too much lime will cause land to bake.

Should like to have the views of some of your correspondents, who have had a more thorough knowledge of farming and its effects, as to the difference in using lime and clover as a manure, over manufactured fertilizers.

I trust the time is near at hand, when the farmer will be amply remunerated for his labor, as they are now moving in the right direction to meet the end in view. I would say, success to our State, County and District Unions—may they grow in interest. Respectfully,

Emory Grove, Md. R. H. PENNINGTON.

THANKS.—We acknowledge the receipt from Mr. H. D. Smith of Arlington, Va., of the famous Arlington Tomato Seed, for which we return our thanks. At seed time we will give them a place in "*Ivy Gardens*."

Age is rarely despised but when it is contemptible.

For the Maryland Farmer.

A SOUND POLICY.

Mr. George Geddes has been contributing some well considered articles to the *Country Gentleman*, on the cost of producing animal food. This gentleman is well known in the State of New York, as one of her most intelligent and experienced farmers, and there is scarcely one of her citizens, perhaps, whose opinions on agricultural topics command more respect where he is known.

He has undertaken to show, generally, that the raising, and even the feeding for market of beef cattle, has become unprofitable in Central New York. "I refer, however, to these articles for the purpose of reproducing a few paragraphs on the subject of feeding sheep, which, to my mind, deserve all the circulation that can be given them. They are not new, nor do they differ from what I have said heretofore, but the pointed testimony, based upon long experience, of two such men as himself and John Johnston, will carry with them a conviction not to be withstood.

Speaking of Mr. Johnston, the writer says: "Mr. Johnston's good judgment has been shown in feeding sheep largely, and cattle on a much more limited scale. For many years before he sold a large part of his farm, he fed regularly large flocks of sheep—sometimes as many as 1,000 head." Mr. J.'s practice was to buy in the fall, merino wethers, and feed four months; selling them fat at the end of that time.

"In conversing on these topics, with this most skilled and experienced farmer of my acquaintance, he said, on one occasion, quite emphatically: 'I owe all I have to feeding sheep in the winter.' The direct profit he found to be considerable, and selling in this way his hay and grain, and converting the straw from his large wheat crops into manure, he had the means of carrying his 300 acre farm to a wonderful fertility."

In the paper before me, Mr. Geddes is comparing the profits of cattle and sheep feeding, and gives his own opinion on this point especially: "Long ago, many of us fed cattle for the direct profit made. Later, some farmers hereabouts fed cattle for their manure, and a few do so yet. But do they not pay too much for the manure? Many years ago, I came to the conclusion, whether correct or not, that I preferred making manure with sheep, and have kept flocks of sheep, and have believed that if we were to take a period of ten years, we raised quite as many bushels of grain on the farm, when we regularly kept nearly a sheep to an acre of land under cultivation—as we could without a sheep on the farm. The sheep grinds

his own food and grinds it finely. He rests in the warm nights, on the high and exposed places in the field, and makes them fertile. A warm place keeps him warm in winter and saves food thereby. His manure is worth more made from grain because it is finer than that made from the ox, and because it is more evenly mixed with the litter that his 'golden hoof,' as the Spaniards call it, tramples upon. He gives an annual dividend in the form of a fleece, that the world must have, and his growth, for the food given, is, probably, more than that of any other meat producing animal.—Ewes, except for fattening, are thought to be more profitable than wethers, for the ewe pays semi-annual dividends. She gives a fleece marketable in the spring, and a lamb that can be sold in the fall."

"The great maxim of good farming in Central New York, should be," continues Mr. Geddes,— "feed all the corn, oats, corn stalks and hay on the farm where it is raised, if there can be found any way of marketing these products by feeding them to cattle, cows, horses, swine or sheep."

It seems to me, the same maxim is even more applicable to the worn lands of Maryland, Virginia and other Southern States. Let nothing except wheat go from a grain farm, and tobacco and wheat from a tobacco farm, until it take the shape of meat or wool or milk or butter, whichever can be most economically made and marketed. Most commonly, sheep feeding will best answer this purpose.

A tobacco grower, acting upon this suggestion, should in part, if necessary, substitute bran and other food bought for his sheep, for the fertilizers now so largely used; and with careful management, would soon have lot after lot so enriched, that twenty acres will produce the crop that now occupies thirty, and wheat and grass following will be increased in like proportion.

N. B. WORTHINGTON.

EARLY PEACHES.

Two of the later novelties in this fruit, are the Alexander and the Amsden, both of which are said to be earlier in ripening than Hale's Early. Of the latter named one, Mr. Teas, of Carthage, Mo., speaks very highly, in the *Country Gentleman*. Mr. D. O. Munson, of Fairfax County, Va., is commencing to raise young trees, and says he has great hopes of their popularity and usefulness to peach growers, and the peach loving public.—Time and trial, however, are necessary to prove their excellence. Should they prove to be what is now hoped for them, they will be a rich acquisition.

D. S. C.

HALE'S EARLY PEACH.

DOVER, DELAWARE, March 20th, 1875.

To the Editors of the *Maryland Farmer*: I find an article in your Farmer, page 88, of the March number in relation to "Hale's Early Peaches."

The oldest Hale's Early trees on this Peninsula are now ten years old—mine are nine. They have nearly all been profitless before 1874, from the premature rotting of the fruit. My oldest trees, 450 in number, the past year, bore full crops, without any rotting. I marketed 1407 baskets from them, besides about 100 that softened *without rotting*, after the last picking—934 baskets were sold in New York averaging 91 cents per basket, clear of freight, commissions, &c., clearing \$849.94—and 473 baskets sold in Philadelphia, averaging 76 cents, \$359.98—whole crop \$1200.42. A single car load, sold in New York, August the 6th, for \$878.75, less freight and commission, \$664.71.

I think the *age* of the trees, more than Mr. Lemossy's plan of allowing the grass and weeds to overrun his orchard, was the cause of his success. I tried this with mine but it failed to do any good. In the spring of 1871 I cut the head, or center stem or limbs, out of my trees, thus exposing the whole interior to the sun and the air; this I think helped them, but I attribute my success more to the fact that the *grass and weeds were kept closely grazed by sheep*—which also ate all the young peaches as they fell, and thus relieved my entire orchard from the curculio for some years.

I have over fourteen thousand peach trees, embracing thirty three different sorts, from one year old to fifteen, and, from my experience, I think peach trees should be cultivated in the spring and the ground kept clear and loose until they are six years old; after that, they should be plowed and harrowed once each year, any time after the crop has been taken off—the later in the fall the better.

I would not have presumed to hazard this opinion were it not that my success in peach growing has been fully equal to that of my neighbors whose mode of cultivating their orchards, has been much more expensive than mine, and somewhat different.

CHAS. BROWN.

THE Article on "Grape Culture—continued"—by D. Z. Evans, Jr., was received too late for publication in this number of the *Farmer*.

SEE advertisement of "Hill's Hog Ringer" in another column. Over 16,000,000 Rings sold in two years!

We call attention to Thos. Norris & Son's advertisements of Implements, Wagons and Seeds.

Mount Arrarat Southern Maryland and District of Columbia Agricultural and Mechanical Society.

This Association held a meeting on the 24th of February, which a very poetic writer, who signs "Agricola," reports to the *National Republican*, and states that there was an unusual attendance.

The chief business of the meeting was the installation of the President elect, Thomas L. Hume, Esq., of Washington City; who, on taking the chair, "which he did in a modest and dignified manner, addressed the meeting in a neat, chaste, and most appropriate speech, which was replete with common sense."

It would appear from Agricola's report, that the most popular subject discussed by the meeting, was a sumptuous repast. The festivities over, Col. W. W. W. Bowie, of Baltimore, our co-editor, who was an invited guest, entertained the meeting "by a learned and profound address." "His discourse was most gratifying and encouraging; in the utterance of which, he was frequently interrupted by bursts of applause, loud and repeated."

Such a demonstration of the admiration of so intelligent an audience, might have confused a young orator, but such has been the expression of appreciation of the soundness of sentiment and eloquence of the veteran speaker so often, that he has learned to look upon it as a matter of course.

We regret that a want of space precludes the publication of Agricola's report of the transactions of that meeting in full, as it is able and interesting.

Annual Meeting of the State Grange of Va.

The second annual meeting of the State Grange of Husbandry of Virginia, met in Richmond, on the 13th of January. About 150 delegates were present at the opening of the meeting, but many more reported subsequently, having been deterred from being present at roll call, by weather, &c.—The Grange was called to order by Master J. W. White. The officers answered as follows: Master, J. W. White; Overseer, *pro tem.*, J. W. Southall; Lecturer, J. W. Morton; Steward, Wm. McComb; Assistant Steward, *pro tem.*, C. T. Sutherland; Chaplain, *pro tem.*, Dr. Wm. T. Walker; Treasurer, W. T. Westbrook; Gate-Keeper, J. J. Wilkinson. The Master made his Annual Report, from which it appears that the chief business of the year had been Organization.

The Order appears to look with confidence and hope to the inauguration of some system of agricultural reform, that will work out its sustentation, and instill new life in all the rural interests of the State.

Maryland Horticultural Society.

MARCH MEETING—AND EXHIBITION.

The March session of this Society was held on the evening of March 18th, at Raine's Hall, Ezra Whitman, Esq., President in the chair—John Oakford, Esq., Secretary pro tem.

There was a fine display of cut and pot flowers—the principal exhibitors being Ezra Whitman, R. W. L. Rasin, John D. Oakford, John Feast, J. D. Brackenridge and others.

The following gentlemen were appointed judges to examine flowers, &c., on exhibition, C. H. Snow, J. A. Oakford and J. Mowton Saunders, who made the following awards:—Best seeding Camelia (Mrs. General Lee), John Feast, \$3; best six cinerarias, Charles J. Baker, \$2; best six pansies, Ezra Whitman, \$2; best six violets, Ezra Whitman, \$1.—Honorably mentioned, J. D. Brackenridge, for cut flowers, amaryllis, sparaxis, &c.; John Feast, for well bloomed camelias of older varieties; a basket of fine lemons from Mr. Baker; also a basket of wespilus japonica fruit from R. W. L. Rasin. There were no azalias or camelias on exhibition.

Captain C. H. Snow reported that he had attended a recent convention of the Baltimore fruit packers, for the purpose of making arrangements for a grand exhibition of peaches, to be held in this city some time during the coming summer, and that his reception was not as warm as was expected, the packers not looking upon the project with much interest. They however appointed a committee to confer with the Society, and take steps to bring about the exhibition.

The President submitted an article which had appeared in the *American*, urging the necessity of erecting a Horticultural Hall in this city, all of which he fully endorsed—and the article was ordered to be incorporated in the transactions of the Society.

R. W. L. Rasin presented some drawings or plans from G. T. Bird for a horticultural hall. The building, he said, could be erected for \$31,123, and the greenhouse for \$16,998. A building on a more modified plan, including the greenhouse, could be built for \$38,237, and upon another plan for \$39,351. On motion all plans for building were referred to a committee of the president, the three vice-presidents from Baltimore city, and the treasurer.

Mr. Sands then submitted the following, which was adopted: "Resolved, that the executive committee be requested to take into consideration whether it is not within the province and means of this society to give some encouragement and effective aid to the "the floral mission" of the ladies of Baltimore, whereby not only may its praise worthy objects be advance, but a wider love, appreciation and demand for flowers be created."

The subject assigned for this evening was "WINDOW GARDENING," the discussion of which was opened by Mr. John E. Feast, who, after referring to the beauties of window gardening, said the three principal things required to grow plants successfully are light, air and moisture. Light is one of the most important agents in the growth of plants; it strengthens the color and matures the growth of both wood and bloom. In cultivating, place the plants as near the glass as possible. Windows facing the south are always the best. Judicious wat-

ering is, perhaps, the most important feature in their management. The last and only general rules that can be adopted are: in winter keep the plants (not then growing) rather dry. In spring increase the quantity of moisture with their activity and the sun's power, keeping them in a medium state. In summer water plentifully, but decrease the supply gradually as cooler weather approaches. Never water a plant without it is dry, and then water thoroughly, so that the soil may get wet to the bottom of the pot. All refuse water should be emptied out of the saucers. Give plenty of air every fine day, but avoid draughts. To grow plants with credit in a window they should be screened from the dry air of the room. This may be done either by a curtain or an inside window. If plants are not screened they will be injured by the gas and dust. Cleanliness is also highly necessary; it may be done by syringing and sponging the leaves, and keeping the plants free from insects. The temperature of the room should be uniform, not lower than 45 degrees at night, nor higher than 75 during the day. In severe weather, when the temperature of the room cannot be regulated, the plants will often have to be removed from the window.

Mr. Feast referred to the many designs of window pots, boxes, jardinières, plant-stands, hanging baskets and warden cases, that were now so plentiful and cheap. Mr. Feast considered the following varieties of plants the most suitable for general window gardening: English ivy, all kinds of ferns, smilax, sago palms, camelia, daphne, myrtles, lily of the valley, gloxinias, achemenes, alocasias, caladiums, cordelines, musk plants, primroses, fuchsias, petunias, geraniums, azaleas, pink, mignonettes, and a hundred others.

The remarks of Mr. Feast were listened to attentively, and the subject was further discussed by Messrs. Brackenridge, Grove and Oakford.

J. D. Oakford suggested that those persons who did not succeed with window plants should state the difficulties they experienced to the Corresponding Secretary, Mr. Feast, who would be pleased to answer all questions at the public monthly meetings.

A long and interesting discussion was had as to what was the difference between professionals and amateurs, the exhibitors being so classed in the last year's premium list—without deciding the question, it was ordered that the premium list be classed as it was last year.

After the transaction of other business, it was resolved that the next monthly exhibition be open for inspection at two o'clock in the afternoon, and the meeting take place in the evening. The April display promises to be a very fine one.

4,000 TONS OF BONES.

Captain Gardener, of Texas, informs the *Baltimore Herald* that he visited the works of R. W. L. Rasin & Co, and saw a pile of 4,000 tons of bones and meat of cattle, slaughtered recently. The Captain states that R. W. L. Rasin & Co's manure is made from these substances, with the addition of sulphuric acid and potash. They are all valuable plant food, and if they are skillfully mingled, manipulated, and applied to crops, the yield cannot fail to be immensely augmented.

THE DAIRY.

Important to Dairymen.

Farmers, in many parts of our country, are now, more than hitherto, turning their attention and labors to Dairy Products; and any thing new and useful on that subject, is of interest to them.

A few days since, I had the satisfaction of reading a very able and instructive paper, on the making and preservation of *Butter*; read by Mr. F. D. Stone, at the Dairymen's Convention, held at Utica, N. Y., on the 12th of January last. I copy a few brief extracts for present consideration of those interested, and may furnish the entire address to your readers, for the next month, if it is desired.

After some interesting historical facts, the writer says, that

MILK

is the natural food of mammals; and in its natural state contains all the elements necessary for their growth and full development. Like all other organic compounds, when exposed to the elements, it rapidly undergoes a chemical change, and loses its value as an article of diet, to a greater or less degree. It is an opaque fluid, generally white, having a sweet and agreeable taste; and is composed of a fatty substance, which forms butter; of a caseous substance which forms cheese; and a watery substance or residuum, commonly called whey.

The fatty or *butyraceous* matter in milk, according to Flint, varies from $2\frac{1}{2}$ to $6\frac{1}{2}$ per cent. The cheesy or *caseous* matter from 3 to 10 per cent., and the *serous* matter, or whey, 80 to 90 per cent.

In Haidlen's analysis of cow's milk, he finds in 1,000 parts:

Water,	873.00
Butter,	0.30
Caseine,	48.20
Sugar of Milk	43.90
Phosphate of Lime,	2.31
Magnesia,	0.42
Iron,	0.47
Ch'oride of Potassium,	1.44
Sodium, Soda,	0.66
	1000.00

If freshly dawn milk be left in a pan, and in a state of rest, at a temperature of 60° to 80° F., the fatty or butter globules rise to the surface, and constitutes cream.

FOOD FOR MILK.

The value of milk for butter making depends greatly on the quality and supply of food and drink furnished to the cows; and it is a well known fact, that the odor and taste of milk and butter, are largely affected by the kinds of food

which the cows eat. Thus, in early spring, when the cows are turned to pasture, in certain sections of the country, where *alliaceous* plants, (garlic, wild onions,) abound, the milk and butter become "leekey," disagreeable, and consequently unmerchable. And the same in winter, if the cows are fed on turnips, or other strongly odorous feed, the butter made from their milk will partake of the peculiarity of their food.

Garbage, carried by milkmen from the city, and fed to their cows—and still slops, and all forms of decayed and fermented matters, and stagnant water—poisons and deteriorates the milk, rendering it, and all of its products, unfit for human food.

And it is no less true in regard to the treatment of milk, after it is drawn from the cow; for, in this condition, it still possesses the property of absorbing from the atmosphere any gas or odor to which it may be exposed. Hence, too much care cannot be observed in "setting" the milk for butter making. It follows, therefore, that the quality of the butter depends, principally, on the character of the milk from which it is obtained; for, in its separation from the fluid portions of the milk, it undergoes no chemical change, or at least should not—the proper separation being wholly mechanical.

The temperature of milk as it comes from the cow, is about heat, or 98° F., and should be kept so till it is put into the pans, and comes to a rest.

TEMPERATURE AND CLEANLINESS.

Many experiments have been made to determine the best temperature for obtaining the cream, and for butter making; and that which it most generally approved among dairymen, ranges from 60° to 70° F. The milk-house should be above ground, well ventilated, and used for no other purpose, than keeping milk and butter making. All vessels into which milk is received and kept, should be kept scrupulously clean; and the churning should be done with a slow and steady motion; by which action the butter globules are ruptured and aggregated into masses. The increased temperature during the process of churning is due to mechanical friction, and not chemical action, as is generally supposed; for the butter undergoes no chemical change, whatever, during the operation.

Butter made from pure cream, possesses the same property for absorbing odors, as does new milk; and hence, during the manipulations of working out the butter-milk, a trough and ladle (preferable made of hard maple) should be used; but the naked hand, however clean, should never be allowed to come in contact with the butter, for the natural exhalations from the pores of the skin, which constantly take place, communicate their properties to the butter. The most approved method, is

to use no water in working butter. The salt used should be of the purest kind, and finely ground.—No coloring matter should be used; it is a pernicious and dishonest practice; and the use of salt petre is also reprehensible, as it is a poisonous drug, and will communicate its properties to the butter.

Many important directions in regard to putting down butter, and preparing it for market; and as to the best vessels to put it into; together with instructions as to the best methods for setting milk, and the pans for holding it; and the true way to make butter keep sweet a long time, with other useful thoughts, which may be given in another article, but this article is already long enough. The article also presents some well proved facts in regard to feeding cows, and the results in milk and butter of some careful experiments in that direction, which will be given in my next article on this topic.

IMPURE WATER BAD FOR COWS.

Mr. C. E. Coffin, of Muirkirk, Md., the distinguished Short Horn breeder, a year or two ago, found that many of his cows suffered frequent abortions from drinking improper water, and upon supplying different, found an abatement of the evil. And Dr. Jenner considered that giving pure water to cows was of more importance than persons are generally aware. There were farmers in his neighborhood whose cows, while they drank the pond water, were rarely free from the *red water*, or swelled udders; and the losses they sustained from these causes, together with the numerous abortions the cows suffered, increased to an alarming extent. One of them, at length, supposing that the water they drank had something to do with producing their disorders, sunk three wells on different parts of his farm, and pumped the water into troughs for his cattle. His success was gratifying; the red water soon ceased, and the swellings of the udder subsided, and the produce of the renovated animals increased both in quality and quantity. Other farmers followed the same practice, and in less than six months not a case of red water, swollen udder, or abortion, was heard of in the neighborhood.

Dairymen and other farmers will do well to give this matter their careful consideration, as very profitable results may be derived therefrom.

D. S. CURTISS, *Washington, D. C.*

CONDENSED MILK.

We have now seven factories for Condensing Milk in this country, and no report has come to us of a lack of demand for all that is condensed:

though a large quantity of the American condensed milk has sought and found a good and growing market in China, Japan, Germany, and to some extent, in other remote markets. There is little danger of overdoing the manufacture of good Dairy Products in this country for many years to come.

The domestic consumption of cheese has greatly increased in the past five years, and the manufacture of more small cheeses, of the best quality, would swell domestic consumption amazingly.

Most good living families would prefer a whole small cheese, to cut cheese of the same weight.

We have of late made good progress in the improved manufacture of dairy products in this country, but we regret that the manufacture of *skim-milk cheese* is so common and so popular with cheese makers; we fear that it will soon become chronic.

We are desirous to hear more of the result of full skimming the milk for cheese, and supplying the place of cream by mechanically mixing with the curd, or with the milk as the curd is forming, *oleo margarine*. We shall be obliged for the full particulars of this process, and how profitable it has proved in practical tests.

It will also interest some of our readers to know the standing in market of the *oleo margarine* butter.

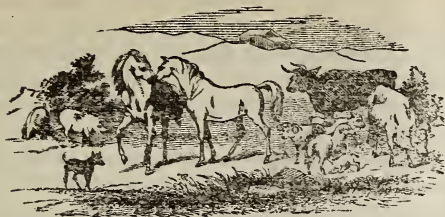
We deem it more commendable for our dairymen to turn their energies to the manufacture of the best butter that they are capable of, from *pure cream*, and the *best cheese* from *unskimmed milk*, and they will always find a market at a full price for dairy products; there is never one fourth enough in our markets of this quality.

Hope for those who dislike Garlicky Milk.

For a month or more in both spring and autumn, it is very difficult to get milk either in Baltimore or Philadelphia free from the flavor of *garlic*. It is so offensive to the taste of many persons, that they prefer to do without milk, rather than use that in which there is even a trace of garlic.

We are happy to state that a very scientific gentleman of this city is experimenting with a variety of substances, by which to destroy effectually the garlic flavor in milk; and he informs us that he feels quite confident that he has hit upon a filter that will be thoroughly effective, not only in removing the flavor of garlic, which has been conceded as impossible, but the flavor of turnips and cabbage when fed in excess, and even the bitterness in milk imparted by consumption of rag-weed, so common all over the country, he thinks he can effectually remove; and that the process will also remove all animal, and other objectionable odors, and greatly improve the healthfulness, purity and keeping qualities of milk.

We have great confidence in the scientific knowledge of the inventor of this new process, and have great faith in his success, and equal confidence in his integrity.

Live Stock Register.**BREEDING AND CARE OF CATTLE.**

POINTS IN ADDRESS-BY D. W. DAKE, AT INDIANAPOLIS CONVENTION.

1st. The male should be known to be of the type you would perpetuate, sound, healthy, and in every other way as nearly a perfect animal as is possible, even if his use has to be paid for, while an inferior one could be procured gratis.

2d. The female is nearly of as much importance in this respect as the male, and therefore none but the best should be bred from, and their offsprings should never be slaughtered before they have been proven to be of little or no value as future breeders.

3d. The comfort of the female through pregnancy is of great importance. The science of physiology is as applicable to animals as to man. The offspring of a second pregnancy is often plainly marked by the getter of the first, and during gestation marked impressions are made on the offspring by the associations to which the female is subjected. Quiet contentment, kind treatment, regular and ample feed, pure water, moderate exercise, shelter from winter's blasts, spring's drenching rains, and summer's scorching rays, are all important.

4th. Parturition is facilitated by this system of special care. Through the period of gestation many a valuable animal has been lost, from abuse, in many ways, and if not lost, the offspring is affected. Whether it shall be amiable or ugly, docile or nervous, vigorous or weak, depends very much on the treatment which the female receives through that period.

5th. Imported cattle, or cattle taken into an entirely different climate from that in which they were bred, seldom show the same degree of excellence as they possess at home, unless given special care. Old cattle frequently die before getting acclimated. This is strikingly illustrated by shipping them South, especially in the spring of the year, if the animal is fat. The arterial system first takes cognizance of the change; the pulsation increases to twice its normal rate, fever is engendered, and death ensues,

Cattle to be taken from the far South to the North, should be shipped in May or June; from the far North to the South, in September or October; for the reason that the change of temperature is not so radical as it would be to reverse this order. The younger the animal, if old enough to wean, the less danger from these causes, and that danger is soonest passed. To avoid this necessity of transportation and consequent risk, some enterprising farmer in every neighborhood could with profit and at reasonable rates raise bulls from pure stock of different types or breeds, for the accommodation of the wants of the farmers of his vicinity.

6th. No animal should be required to drink water which the owner himself would refuse, and especially so if that animal is the cow from which you hope to make good butter. It is sufficient on this point to say that pure water is an indispensable article to the success of the dairyman, for good butter or cheese cannot be made where good water cannot be obtained.

7th. In considering the subject of feed, it seems proper for me to say, that the nourishment of the animal system is obtained principally through the agency of blood, and the composition of the blood is chemically very nearly the same as milk, which is the nearest approach to a perfect diet, being prepared in the laboratory of Him who is the author of all chemistry. It will, therefore, be of interest to study its composition, and as like produces like, to feed such food to produce bone, or sinew, or flesh, or milk, as shall approach nearest in its composition to them.

8th. The best food for most animals should be so mixed as to approach as nearly as possible to the chemical properties of milk, and especially so for the cow. Milk must go in at the mouth if you would draw it from the udder.

It is a well-established fact that meal or bran should never be fed separately and alone, for when swallowed by the cow it goes directly to the fourth stomach and is put partially digested; whereas, if it were mixed with cut hay and moistened or steamed, it would pass into the first stomach, be raised to the mouth in the end, remasticated, more thoroughly digested, and therefore do the animal more good. Many farmers feed their cattle corn on the ear, and depend on their droppings to support their swine, when if ground and fed with hay, it would have been thoroughly digested by the cow, and the pig would probably have had a breakfast at first hands.

The practice of cooking or steaming food has been demonstrated to be of great utility. Some contend that the returns are not commensurate with the outlay of muscle and money. They are usually men, however, who study their own convenience and comfort, and consider them of more importance than all other matters combined.—*Live Stock Journal.*

USEFUL RECIPES.

TO REMOVE A FILM IN THE EYE OF A COLT—Take hen's oil, put some in a phial; take a feather from a goose or hen's wing; put the feather end into the phial; then take hold of the lash of the eye with the thumb and finger, raise it a little, and with the other hand give a slight brush across the ball of the eye, giving two applications a day for the first day or two; if the eye is much inflamed then use once a day till the eye is well. I have tried it on horses, on cattle, on sheep, for over twenty years, and never knew it to fail. I wish that all who deal in horses would apply this simple remedy; if they would, there would be fewer blind horses. I wish all who see this notice would try it on any dumb beast if the eyes run water.—*Clyde in Rural New Yorker.*

REMEDY FOR LOUSY STOCK.—Sour butter milk will do the work effectually, without any of the deleterious effects of lard and tobacco, Scotch snuff, train oil, etc. Try it. One or two washings is all that is necessary. It does not weaken and debilitate the stock but rather gives strength.—*Rural New Yorker.*

TO REMOVE PROUD FLESH.—Pulverize loaf sugar very fine, and apply it to the part affected. This is a new and very easy remedy, and is said to remove it entirely without pain.

SWEENEY REMEDY.—A correspondent of the *Cincinnati Gazette*, says: Take equal parts of sweet oil, turpentine and hartshorn; put in a vial and shake well; then add chloroform, and shake it up well before using. Put it on three mornings in succession, freely; then hold a blanket on it for ten minutes. It is a sure cure. It also cured rheumatism for me, in my arm, from which I had been a sufferer for twenty years.

CAKED BAGS IN COWS.—A correspondent in the *Cincinnati Gazette* says for cake bag in cows, get ten cents worth of dry iodine; fill a cup with good fresh lard, and stir in the iodine till it is thoroughly mixed; let it stand for a day or night; stir it again and rub it in with the hand frequently, and a cure is certain. Whoever employs the violent remedies should understand that they may do more than is desired. Iodine affects the secretions wonderfully, and causes the absorption of tumors and abnormal growths; may it not also cause a decrease in the secretion of milk? We have found that persistent rubbing and kneading was better than anything else. If the bag be very tender, as it often is, take a teaspoonful of tincture of arnica in water, and rub the same diluted with twice as much water upon the bag, to take out the soreness.

GRUBS IN HORSES.—A writer says that he has never known but one remedy for grubs in horses worth publishing, and that one is sage tea. He says as soon as one is satisfied that his horse has the grubs, (which are sure to kill) he should make a strong sage tea, and wrench the animal once or twice, or until a change is effected. But "as an ounce of preventive is worth a pound of cure," it would be well to give the horse a cupful of pulverized sage leaves in some meal or bran once or twice a week.

LICE ON STOCK.—A very simple remedy is to scatter a few dry wood ashes along the back, from the horns to the tail. Usually two applications are sufficient. Hens should always have ashes to wallow in. They keep off insects.

The Importance of Farm Accounts.

We give below, a statement of F. Morgan, Esq., of Amelia Co. Va., addressed to Col. F. G. Ruffin, of the *Planter and Farmer*, relative to the results of applying certain fertilizers, but the data, giving the substances, and amount of each in a very efficient application is lost.

Mr. Morgan stated that after a crop of tobacco of 500 pounds per acre, on land when plowed, but moderately fertile, on which he applied farm pen manure, and 200 pounds Gilman's Tobacco Fertilizer in the drill to the acre, before planting, and 200 pounds more of same per acre applied broadcast, when the tobacco was killed and coming in top—season very dry.

The tobacco was followed by wheat, applying 200 pounds more of a mixture prepared by the same manufacturer of fertilizers, which Mr. Morgan thinks was equal parts of German potash and plaster. The yield of wheat which was 40 bushels per acre, of good wheat, seeded with clover, the product the finest he ever saw, measuring 3 to 5 feet in height.

The clover was followed by tobacco, with 300 pounds of "Wilson's Tobacco Grower," per acre, applied broadcast, and produced 1250 pounds per acre of first class shipping tobacco—a wheat crop followed, with no manure, yield 27½ bushels per acre; a fine crop of clover following the wheat.

The land, he states, appears to be in a high state of fertility at present. This rotation of crops commenced in 1868. The production is so remarkable, that it is greatly to be regretted that the precise character of the fertilizers used, and the aggregate cost of the same, with the value of all the crops produced could not have been preserved.

Such clover, and such wheat, 40 bushels per acre, and such increase in the tobacco crop, are altogether so great, that the fertilizers used must have been invaluable.

Now, had there been a proper farm account kept and preserved, those having similar land might reasonably expect, with similar culture, and similar applications, to derive similar desirable results.

We feel that we cannot too strongly urge the importance of keeping full and correct farm accounts, to which we have so repeatedly called the attention of our readers.

THE POULTRY WORLD, published by H. H. Stoddard, Hartford, Conn. This beautifully printed monthly, is full of valuable matter in reference exclusively to poultry, and interesting to the fancier, family and market poulterer. Each number is profusely embellished with very fine illustrations of poultry houses, and life-like pictures of the different breeds of domestic fowls. We heartily commend it to all who are interested in breeding poultry for pleasure or profit. The regular subscription price is \$1.25 per annum.

WOODLAWN FARMERS' CLUB.

MARCH MEETING—1875.

This popular old Society held its regular monthly meeting, at the pleasant farm of D. P. Smith, Esq., at Collingwood, Fairfax County, Virginia, on the 20th of March; and, although the weather was unfavorable, there was a pretty full turn-out of the farmers, with their wives and daughters. The President, C. Gillingham, being absent, Hilman Troth was chosen Chairman; Mr. Pierson, Secretary.

Winter wheat and rye, in this Potomac region, are looking pretty well; and the promise of a good crop of most fruits is fair, so far, unless frost interferes.

FEEDING STOCK AND POULTRY.

Some members thought six quarts of corn meal, or eight quarts of oat meal, with hay or fodder, good feeding for milch cows. Oats were said to be the best feed for horses, and other animals; that grain was claimed to be the best also for poultry. Some members had found good clover hay cut up fine and mixed with meal, made more profitable feed for hogs, than meal or corn alone.

LIME—OYSTER SHELLS—SALT.

Considerable debate was had as to the value of lime as a fertilizer, and it was generally conceded to be valuable for wheat, grass and garden truck. The majority of members thought stone lime more valuable than shell lime. Some members thought oyster shell lime to be of very little value; but thought stone lime, 30 to 100 bushels to the acre, of great benefit, particularly for corn and potatoes. It was maintained that lime and ashes are very beneficial around the roots of fruit trees. Salt was considered very valuable for land and crops.

BULLS AND DAIRY COWS.

This topic elicited discussion. The larger number believed grades of Alderneys with native cows better for milk. Most of the members maintained that young bulls were more serviceable than old ones for several reasons. Some members preferred crosses with the Holsteins better; some recommended Ayrshires and Short Horns, for milk.

Simply for butter, the prevailing opinion was, that Alderneys are best; but for quantity of milk, the crosses, or grades, were preferred to the full bloods of any breeds.

The Committee previously appointed to report on the cost of getting lime, stated that lime could be had for 21 cents per bushel, by the car load, delivered at Alexandria, on the cars.

CRITICAL COMMITTEE.

The committee to report on the condition of the farm and stock of Mr. Smith reported them in creditable condition and well managed. These critical committee reports constitute an interesting feature of these meetings, and are the occasion of much humorous and pleasant remarks among the geniuses.

DINNER AND JOKES.

A bountiful and rich dinner was served by the hostess to the large number of guests, who did lively honor to it. Many pleasant jokes were cracked and joy prevailed.

RAISING SWEET POTATOES.

Upon reassembling several topics were considered, especially the raising of sweet potatoes and securing plants. A good hot-bed should be made, the sweet potatoes then placed in it and covered with light soil, and the bed watched that it get not too hot or too cold. When the sprouts are large enough they are to be set out in the ground where they are to grow. Any good gardener knows how to make a hot bed, in order to be warm enough to germinate plants or sprout the potatoes. The sprouts are to be planted in rows or drills far enough apart to work among them with cultivator, and one to two feet apart in the rows; they need warm, sandy, loose land.

Sweet Potatoes can be propagated only from the tubers, as they bear no flower seeds; but, sometimes, with great care they have been raised from slips cut from the vines.

TRUCK FARMING

was designated as subject for consideration at next meeting, to be held at "Gunston Hall," the farm of Col. Daniels, on the 17th, April. The only fruit exhibited, was some fine apples, the "Spice" apple, in good condition, by Stacy H. Snowden, the most extensive fruit grower in the Society.

D. S. C.

REASONS IN FAVOR OF TOP-DRESSING LAND.—

On this subject the *Country Gentleman* says: It affords protection against the sun and frost. It mellows the ground beneath it. It keeps it moist. It is the best means of distributing the strength of the manure through the soil—by saturating it. It puts it where the roots are—near the surface. It affords a direct chance for the sun and air, and the rains and dews to act upon. It prevents the usual waste into the atmosphere and gutter. It keeps the nitrogen longer in the soil in its passage down. It continues feeding the land as it decomposes. It has all the advantages and none of the disadvantages of plowing under. It is itself plowed under at last—what remains of it.

CROMWELL & CONGDON.—A copartnership has been recently entered into between these gentlemen, to prosecute the business heretofore conducted under the name of Richard Cromwell, as dealers and manufacturers of Agricultural and Horticultural Implements. They are also growers and importers of all kinds of Field, Garden and Flower Seeds. As proprietors of the extensive Patapsco Nurseries, located near Baltimore, they can fill orders for Ornamental and Fruit Trees Shrubbery, Vines, Roses, Green House and Bedding Plants. This house with Nurseries, has been long established, and are entirely reliable in all business transactions. See their advertisement.

Sprigs of wintergreen or ground ivy will drive away red ants; branches of wormwood will serve the same purpose for black ants.

The Poultry House.

Improving Barn-Yard Races.

The immense growth of the poultry interest within the past few years, has raised the standard of all our pure-bred poultry, but not the barn-yard fowl. To accelerate the continued improvement in the average quality of our fowls, we must, by an infusion of better blood, supply our barn-yard fowls with desirable characteristics. We must not discard them, as they have many points of value which we must not recklessly destroy. Our best breeds, we must remember, are largely drawn from the common stock of our own and foreign countries, and with our later discoveries in breeding, we should be able to again commence with common fowls and breed up something of real and permanent value. Mate some fine cock of the blooded breeds with a hen of the best common fowls, and this will give fifty per cent. of the improved blood to the chicks. This practice may be continued each year, and as the old hens die off we have a much better stock than formerly. For instance, use the first year a Light Brahma cock, next a Golden Spangled Polish, followed by a Partridge Cochins, and so on, varying as we need more size or broader backs, shorter legs, or the development of some other point.

AFRICAN BANTAMS.—Master Reed, Pittsburgh, Pa., writes the *Rural New Yorker* that he has some imported African Bantams, which he thinks "are the prettiest kind there is. They are just as black as coal, have rose combs and white ears; otherwise they look a good deal like partridges.—They have even been thought to be prettier than the prettiest of our flowers. Unless the plants are very small, or the seeds are planted in newly dug up soil, they do scarcely any injury to the garden. In fact they are just the things to keep out grubs, etc."

AGE OF TURKEYS TO BREED FROM.—The *Live Stock Journal* replies as follows to the query, which are most profitable to breed from, turkeys one, two or three years old?

The male turkey does not attain its greatest vigor until the third or fourth year, therefore a cock two or three years old is better than a year old for breeding. But it is well to change the male every year, which is believed to produce healthier and stronger chicks; and hens two years old and upward are also best for breeding.

Soapstone hearths are first washed in pure water and then rubbed with powdered marble or soapstone, put on with a piece of the same stone.

START MODERATELY.

It is a very common thing that farm teams are injured more in a day, when first put to work in the spring, when their muscles are soft from idleness, than they are need be by a month's moderate and proper labor, after they have acquired strength by proper work.

It is also very important to watch closely the harness and yokes, that they fit and bear properly. A sore shoulder or a swollen neck, has often been produced in a half a day's plowing at the outset, that will cause the poor animal to work in misery all the season.

It is very useful to bathe the parts on which harness and yokes bear most heavily, with tepid salt and water, with a tablespoonful of tannic acid added to each gallon of the brine.

Bathe when the teams are first turned out from work, with pure tepid water, until the perspiration and dust is removed, then with the brine and tannin.

Have the surface of the shoulders dry and clean when the teams are harnessed, and avoid working them in the rain. For teams that are required to work in the rain, vandykes, covering the shoulders, are of great service.

None but a lazy teamster will allow the hauness or yoke to remain on teams whilst they eat their mid-day meal. Teams will perform more labor on the same feed, in a given time, by giving them water every two or three hours—the water should stand in the sun, if practicable—it should not be cold on any account.

A GOOD LAWN.—The first great requisite in making a lawn is to have good drainage, after which prepare the ground by deep plowing and also by subsoiling, the soil requiring to be well pulverized and enriched, to expect any success in our hot climate.

A good lawn is one of the most pleasant appendages to a house; but to make it so, it requires to be well attended to, both in the formation and by keeping it mown every two weeks at farthest, using the most approved lawn mower. By doing so you will soon have a lawn like a carpet. Inexperience and neglect have been the causes of numerous failures.—*Scientific American*.

SALE OF HEREFORDS.—Mr. John Merryman, of Hayfields, Baltimore county, has recently sold his Hereford yearling bull, "Duke of Edinburgh," out of imported Giantess, by imported Sir Richard, 2d, to Col. Edward Lloyd, of Wye House, Talbot county, Maryland. He has also sold to the Messrs. Rasin, Kent county, his yearling bull September, out of Milton, 2d, by Sir Richard, 2d, and has purchased from Mr. Fred. Wm. Stone, of Guelph, Ontario, Canada, the yearling Hereford bull "Canadian," out of Bonny Lass, by Commodore in Chief, selected by Mr. Stone in Herefordshire.

A Chat with the Ladies for APRIL.

BY PATUXENT PLANTER.

The exquisite charm of spring's first ringing laughter

We measure only by the winter's gloom;

The walling winds, the whirling snows make room
In our half frozen hearts for sunshine after!

If every morn were fair and all days golden,

And only emerald turf our footsteps trod,

Our sated souls would tire of velvet sod,

Our eyes in spells of snow-capped peaks beholden!

We gauge the flow'rets beauty by the mould

That lies so long and dark its sweetness over;

As absence makes his rapture for the lover,

Who sees no light till he fond eyes behold.

So God be praised for wintry blasts and snows,

That end their lessons when the violet blows!

—Harper's Magazine.

"The Spring's scented buds all round us are swelling,
There are songs in the streams, there is health in the
gale;

A sense of delight in each bosom is dwelling,

As float the pure day-beams o'er mountains and vale.

The desolate reign of old Winter is broken,

The verdure is fresh upon every tree."

Well! the dark and stormy winter has passed—old
March stormed and roared, but has passed away, to
give room for genial, coquettish April—bright and
smiling, then weeping like a Nobe, cold and chilling,
and anon, warm and gushing as a joyous maiden
just freed from the trammels of school.

It bids our rural ladies to be up early, if they wish
to see the "white sparrow," when setting their flower
garden in order, sowing seed, planting flower roots
and bulbs, arranging, in proper order, the shrubbery,
or, while the dew is on, enjoying the bloom of the
Hyacinths, Crocus, Bleeding Heart and Narcissus,
&c. If the weather be favorable, there will be a
mighty fine show of early spring-flowering plants
after the middle of the month, with the lawn pre-
sented a finer and richer coat of grass than at any
other time of the year. Here let me say, if you de-
sire to have a beautiful turf all the year, get a *Lawn
Mower*, and never let the grass get higher than three
inches, then the Mower will give entire satisfaction,
and it will be healthy and pleasant exercise for the
young lads and girls—equal to the game of croquet
or battle-dore and shuttle-cock. Give the lawn a
good dressing of one part plaster, and two parts
ashes. If the ground is uneven in spots, use a heavy
roller, or have it spaded up, raked level and re-seed-
ed. The lawn gives no pleasant or satisfactory ap-
pearance, unless smooth and free from ruts or un-
evenness, both on undulating slopes and level ground.
This is your opportunity to fill your grounds with
shade trees, shrubs, climbers of every sort, roses of
which you cannot have too many, and in the collec-
tion, forget not the grand old sorts—flowers, both an-
nual and perennial.

The culture of flowers is the most beautiful, at the
same time, the most invigorating, of all the out-door
exercises that lovely women can practice. How
many are pining for lost or absent ones, because of
man's false vows, would find relief in floriculture, if
only extended to a few plants, which would distract

attention, and as they bloom, will restore the rosy
hue of health to the pining beauty's cheek. There is
no highly cultivated mind, no true and feeling heart
that loves not flowers, and all things in art and na-
ture that are beautiful, and which lift the thoughts
and feelings from the grovelling cares and troubles
of earth to a sublimer and purer region akin to
heaven.

In your selection of plants, permit me to suggest a
few that should not be dispensed with. Among the
verbenas, be sure to get the *Montana*, from the Rocky
Mountains, it stands the coldest winter out of doors,
and has large rose-colored flowers. The pure white
from California, is a new and beautiful verbenas, fill-
ing a want long felt by admirers of this most inter-
esting class of flowers. There are many new plants
and varieties of plants out this season, for which
look into the several superb seed catalogues for this
year.

Flowering bulbs like Gladioli, and shrubs of all
sorts, should be set out *early* this month. Flower
seeds of all kinds, with but a very few exceptions,
ought to be sown this month.

Now ladies, you that are mothers, pardon me for
closing this chat with commending to you the follow-
ing answer of the *Davenport Democrat*, to the ques-
tion: "What shall we do with our daughters?"

Teach them self-reliance.

Teach them to make shirts.

Teach them to make bread.

Teach them to foot up store bills

Teach them not to wear false hair.

Teach them not to paint nor powder.

Teach them to wear warm thick shoes.

Teach them to make a good meal of victuals.

Teach them every day, dry, hard, practical, com-
mon sense.

Teach them how to darn stockings and sew on
buttons.

Give them a good substantial common school edu-
cation.

Teach them to say no, and mean it, or yes, and
stick to it.

Teach them to wear calico dresses, and do it like a
queen.

Teach them to regard the morals and not the
money of a beau.

Teach them to have nothing to do with intemper-
ate and dissolute young men.

Teach them accomplishments—music, painting,
drawing—if you have time and money to do it with.

Teach them that God made them in His own im-
age, and no amount of tight lacing will improve the
model.

Teach them that a good steady mechanic without
a cent, is worth a dozen oil patent loafers in broad-
cloth.

VICK'S FLORAL GUIDE—No. 2, for 1875. Of all its
very interesting predecessors, this number of the
Floral Guide is the best. The handsome illustrations
and clear type; its charming reading matter and yet
solid, instructive information, about floriculture,
&c., will commend it to every lover of flowers. The
article on "The Government Seed-shop at Washing-
ton" must meet the approval of every honest patriot
in the land.

For the Maryland Farmer.

THE GARDEN.

Dear Farmer: I cannot express my surprise upon receiving the March number, to see the name of "John Wilkinson," upon the cover—not surprised that Mr. Wilkinson should be upon the staff of the Farmer's Editorial—Oh no! but—that—he was not a Colonel!! I always thought when I looked at my book, of the Old Gray Parrot, when taken to the Parrot show, looking sagely around, exclaimed suddenly, "Oh Lord, what a lot of Parrots!" I'm glad he's got a title, any how; I wish you had added that instead of taken the others off. I guess the reason I like titles, is, I live away down in an out of the way part of the world where neither Colonels nor Professors are the natural growth of the soil!

With us winter has been quite a success. Old Boreas has had a long, wild frolic, leaping, roaring, galloping from the briny waves of the Atlantic, to the quiet shores of the Chesapeake, regardless of any obstacles in his way.

"It has been a winter such as when birds die
In the deep forests, and the fishes lie
Stiffened in translucent ice which makes
Even the mud and slime of the warm lakes
A wrinkled clod, as hard as a brick, and when
Among their children, comfortable men
Gather about great fires, and yet feel cold."

But the sun rises higher, and higher, and the warm noons and lengthening days, brings the welcome assurance of a change of seasons. Spring brings with its abundant work in every department, but it also brings pleasures that belong to other seasons—its soft airs and sportive breezes, its glittering sunshine, and bright flowers makes it a season of delight as well as of toil. April is the month for gardening, and as the care, and arrangement of the garden generally devolves upon the ladies, a few words upon that subject may not be amiss. There is a wise saying, "a place for everything and ever, thing in its place," then let there be a place around every homestead for a vegetable garden, and everything be in its place there; only a little care and attention is necessary to grow in perfection almost every kind of vegetable; high manuring, and constant tillage, every garden requires; a hot bed is indispensable for starting early plants, and the resolution to keep down the weeds—nearly every garden is infested with a multitude of unnecessary weeds—because they are allowed to go to seed, without any attempt being made to exterminate them. In China and some parts of Europe, weeds in gardens are said to be unknown, simply the result of long continued and careful cultivation; therefore keep the weeds down and the soil loosened up, that the rootlets of the young plants may find "ground, air, and moisture to grow in." Be sure to procure good seed, as a great deal of your success depends upon that; a good assortment can always be found in the descriptive list of esculent seed, furnished by E. Whitman & Sons, and reliable information each month in "The Maryland Farmer," so there need be no such word as fail. In no way can an acre of ground be so well employed as in a garden. "The Chinese have floating gardens. The Persians hanging gardens. The Arabians fountain gardens," but ours are household gardens, and often life's happiest moments are spent in arranging and decorating the spot, so intimately connected with the comforts of our home. "It was in the garden,

that Homer composed his great poem—"The Illiad." It was in the garden, that Plato discussed, Eve sinned, and Jesus prayed" and in your garden you may find an Eldorado of consolation, forgetting life's cares and troubles for a while, amidst your admiration and enjoyment of the wonderful products of nature.

WICOMICO.

Publication Received.

From the Secretary of the "Board of Trade," Charles Randolph, Esq., the *Seventeenth Annual Report of the Trade and Commerce of Chicago*, for the year ending December 31st, 1874. A well arranged and apparently carefully compiled Statistical Review. We prize the work for Western Statistical reference.

We are in receipt of the "Baltimore Trade Review," published by Charles Harvey & Co., Dr. John T. King, Editor. It is issued weekly and contains a full report of the Baltimore markets—and its news columns abound in solid reading, just the kind we need in panicky times. We notice that it extracts largely from this journal.

The "BALTIMORE BULLETIN," published every Saturday by W. W. Laffan & Co., is a live journal.—Its past interesting character is now intensified by the continuous publication of a wonderful work entitled, "*Earth not a Globe!*" by "Parallax." The last issue contains a lengthy and very interesting chapter, illustrated by 16 cuts, explanatory of the theory of the author, that the earth is simply a vast plane, and not a globe. The subscription price is \$2, but \$2.50 per annum, post paid.—Every one should read it.

THE MARYLAND PLOUGHMAN AND CHESAPEAKE GRANGER published at \$1 a year by E. S. Riley, Jr. & Co., Annapolis. It is monthly, containing thirty four pages, with an attractive title printed in four colors. The contents relate to Agricultural, and Grange affairs, also general literature.

From JOHN SAUL, his Catalogue of new, rare and beautiful plants for 4875 Washington City, D. C. This Catalogue is illumed with a large and superb colored lithograph of a new splendid Pelargonium, named Queen Victoria.

From Loring, Publisher, Boston, "\$350 a year; How I make it by my Bees, and how others may soon do the same." Price 25cts.

From A. Hance & Son, Nurserymen and Florists, Semi-Annual Trade List—Red Bank, Monmouth County, New Jersey.

From E. J. Roe, Highland Falls, New York, catalogue of Strawberry, Raspberry, Blackberry, and Currant Plants, &c.

From Wm. H. Moon Greenwood Nurseries, Morrisville, Pa., their catalogue.

S. M. PETTENGILL & Co's. ADVERTISING MAGAZINE, for March. 37 Park Row, New York.

RICHARD WALZ'S PHOTOGRAPHY.—Mr. Walz's Photographic Establishment, 46 N. Charles Street, Baltimore, has an enviable reputation. It turns out a great variety of superb work; for which he possesses the best of facilities of every kind, for producing life-like portraits—and his stock embraces all required in the wonderful and beautiful Art. His emporium is a Museum of Photography.

THE JENIFER ARABIAN.—We call attention of breeders of horses, to the advertisement, in this number, of Col. Jenifer's splendid and beautiful Arabian, who has received many premiums, and been universally admired. The Col has conferred an inestimable benefit upon the public by his enterprise, if the services of the horse shall be promptly availed of, by such as desire to improve our light draft, saddle and trotting horses. The best racing blood in England traces back to Arabs, and the best trotters in America have Arabian ancestors.

BALTIMORE MARKETS--March 27

Prepared for the "Maryland Farmer" by **GILLMORE & ROGERS**, Produce Commission Merchants, 159 W. Pratt st.

[Unless when otherwise specified the prices are wholesale.]

ASHES.—Pots \$7.25;

BEESEWAX.—Firm; 30@30 cts.

BROOM CORN.—Dull at 10@11 cts.

COFFEE.—Prices range from 17@19 cts. for ordinary to choice, gold duty paid.

COTTON.—Market active—Ordinary, 14cts; Good Ordinary 15½ cts; Low Middling, 16 cts; Middling, 16½ cts; Good Middling, 16 cts; Middling Fair, 16½ cts.

EGGS.—Fresh lots—Md. and Pa., 24 @ 25 cts.

FERTILIZERS.—No change to note. We quote:

Peruvian Guano..... \$56 ½ ton of 2000 lbs

Turner's Excelsior..... 55 ½ ton "

Turner's Ammo. S. Phos..... 45 ½ ton "

E. F. Coe's Ammo. S. Phos..... 55 ½ ton "

Soluble Pacific Guano..... 50 ½ ton "

Rasin & Co., Soluble Sea Island Guano 50 ½ ton "

Rasin & Co., Ground Bone and Meat.. " "

Rasin & Co., Ammonia, Potash and Bone Phosphate of Lime..... " "

Flour of Bone..... 60 ½ ton "

John Bullock & Sons Pure G'd Bone.. 45 ½ ton "

Whitman's phosphate..... 50 ½ ton "

Bone Dust..... 45 ½ ton "

Horne's Maryland Super Phos..... 50 ½ ton "

Horne's Bone Dust..... 45 ½ ton "

Dissolved Bones..... 60 ½ ton "

Missouri Bone Meal..... 47 ½ ton "

New Jersey Ground Bone..... 40 ½ ton "

Moro Phillips' Super-Phosphate Lime 50 ½ ton "

"A A" Mexican Guano..... 30 ½ ton "

"A" do. do..... 30 ½ ton "

Plaster..... \$1.75 ½ bbl.

FRUITS DRIED.—Cherries, 25@26 cts; Blackberries, 9@9½ cts; Whortleberries, 16 cts; Raspberries, 28@30 cts; Peaches, peeled, bright, 23@27 cts; Peaches, unpeeled, halves, 7½@8 cts; Peaches, unpeeled, quarters, 6@7 cts; Apples, sliced, bright, 7½@8½ cts; Apples, quarters, bright, 7@7½ cts.

FLOUR.—Market Active—Super \$4.25@4.50; Extra 4 75 @5.25; Western Family 5 37@6.25; Choice family, \$8.00@ \$8.25.

GRAIN.—Wheat—Quiet, fair to choice, white, 1.32@1 35; fair to choice, red, 1.30@1 35 *Common*—Southern white, 82 @85—Yellow do 79@80—Western mixed 83½ cts. Oats—68@70 cts.

HAY AND STRAW.—Timothy Hay, dull, at \$18@21 per ton; Rye Straw \$13@14; Oat Straw 11@14; Wheat straw \$11 00.

HIDES.—Green 9@10 cts.; Dry salted 13@14 cts.; Dry Flint 15@17 cts.

PROVISIONS.—Bacon Shoulders, 9 cts.; Clear Rib Sides, 10½@11 cts.; S. C. Hams, 14@16cts.

POTATOES.—Early Rose 2.75@3.25 per Barrel.

RICE.—Carolina and Louisiana, 7@7½ cts.

SALT.—Ground Alum \$1.05@1 15; Fine \$1.95@2.10 per sack; Turks Island 30@32 cts. per bushel.

WHISKEY.—\$1.00 per gallon.

INFORMATION, of great value to every family, sent FREE. Address, for Circular, F. W. BROWN, 177 West Fourth Street, Cincinnati.

NEW ADVERTISEMENTS.

Thomas Norris & Son, Implements and Wagons.
Cromwell & Congdon, Implements, Tools, Seeds, &c.

W. H. Jenifer, "The Jenifer Arabian."

New York Slate Roofing Co., Slate Roofing Paint.

Minard Harder, Threshing Machines.

L. Clark, Peerless (ane Seed.

W. W. W. Bowie, Ayrshire Bulls for sale.

H. W. Hill & Co., Tin Wire Rings.

H. T. Bond, M. D., Cancer Cured.

Thos. Waring & Bro., Pure Ground Bone

T. Allman Cochran, Eggs for sale.

THRESHING MACHINE HARDER'S PREMIUM

Railway Horse Power, and Thresher and Cleaner, the
"Best Ever Made," awarded the

TWO GRAND GOLD MEDALS,

At the Great National Trial, at Auburn, N. Y.

For "Slow and easy movement of horses, 15 rods less than 1½ miles per hour, Mechanical Construction of the very best kind, thorough and conscientious workmanship and material in every place, nothing slighted, excellent work, &c," as shown by Official Report of Judges. Threshers, Separators, Fanning Mills, Wood Saws, Seed Sowers and Planters, all of the best in Market. Catalogue with price, full information, and Judges Report of Auburn Trial, sent free. Address:

MINARD HARDER, Cobleskill, Scho. Co., N. Y.

ap-4t

CANCER, Cured by Dr. BOND'S Discovery.

Remedies, with full directions, sent to any part of the world.

Send for pamphlets and particulars. Address

H. T. BOND, M. D., Penna. Cancer Institute,

3208 Chesnut Street, Philadelphia, Pa. apply

TREES, Etc.

We offer for **SPRING, 1875**, an unusually

LARGE STOCK OF WELL GROWN, THRIFTY

Standard and Dwarf Fruit Trees.

Grape-Vines, Small Fruits.

Ornamental Trees, Shrubs, Roses.

New and Rare Fruit and Ornamental Trees.

Evergreens and Bulbous Roots.

New and Rare Green and Hot-House Plants.

Small parcels forwarded by mail when desired.

Prompt attention given to all enquiries.

Descriptive and Illustrated priced Catalogues sent prepaid,

on receipt of stamps, as follows:

No. 1—Fruits, 10c. No. 2—Ornamental Trees, 10c.

No. 3—Greenhouse, 10c. No. 4—Wholesale, Free.

Address,

Establish'd 1840.

ELLWANGER & BARRY,

fe-St Mount Hope Nurseries, ROCHESTER, N. Y.

THE "JENIFER ARABIAN."

This Celebrated Thoroughbred Arabian Stallion

Will receive Mares near Baltimore, Md., COMMENCING APRIL 25th. This famous Arabian is too well known to need a full description here; his success as a stallion is known throughout the States of Maryland and Virginia, and his colts are so highly prized that none can be purchased, except at enormous prices. His superb trotting action is attracting the attention of breeders of trotters and some fine trotting mares have already been stunted to him.

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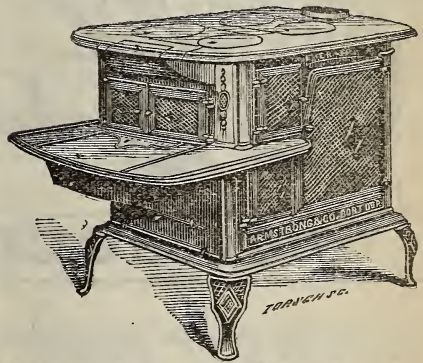
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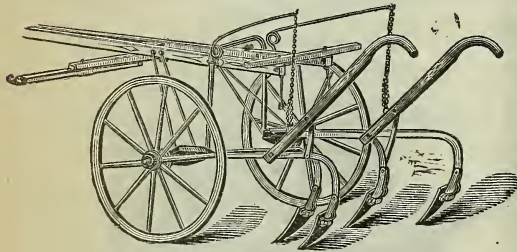
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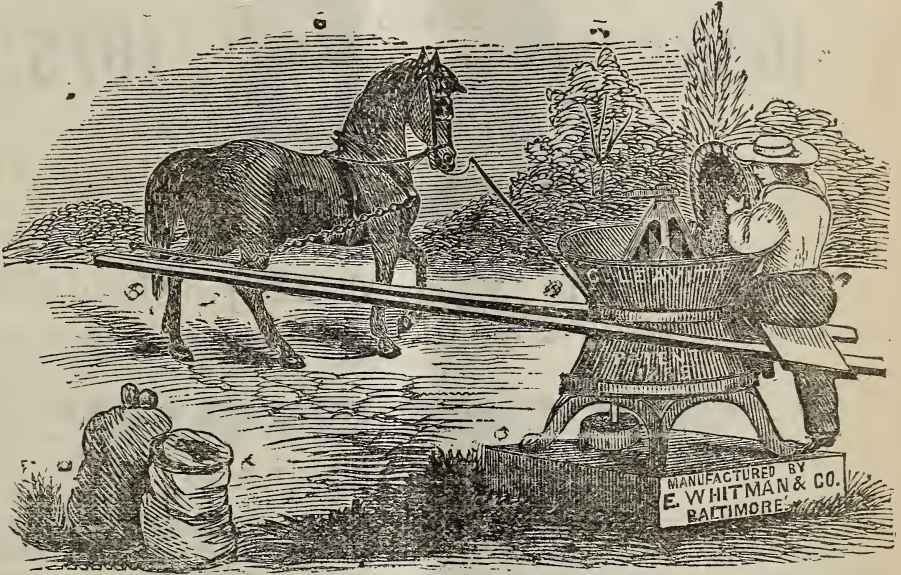
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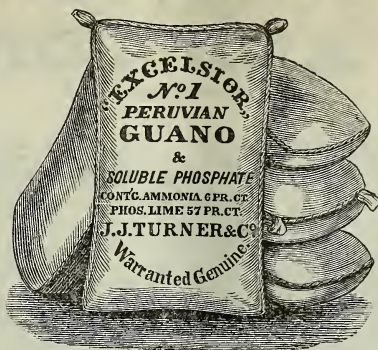
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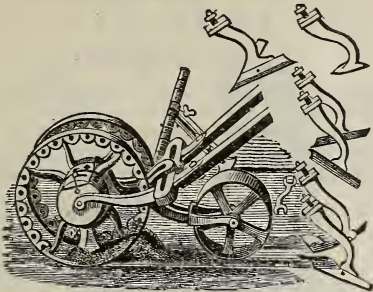
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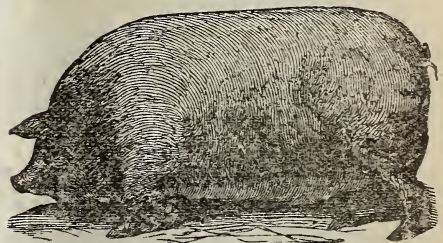
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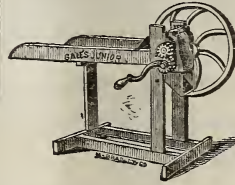
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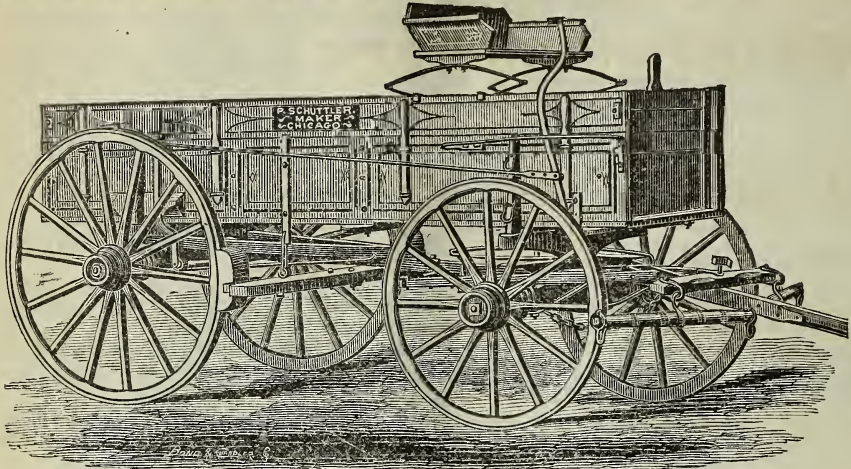
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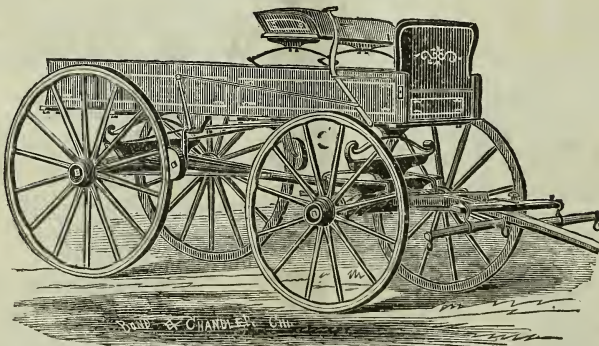
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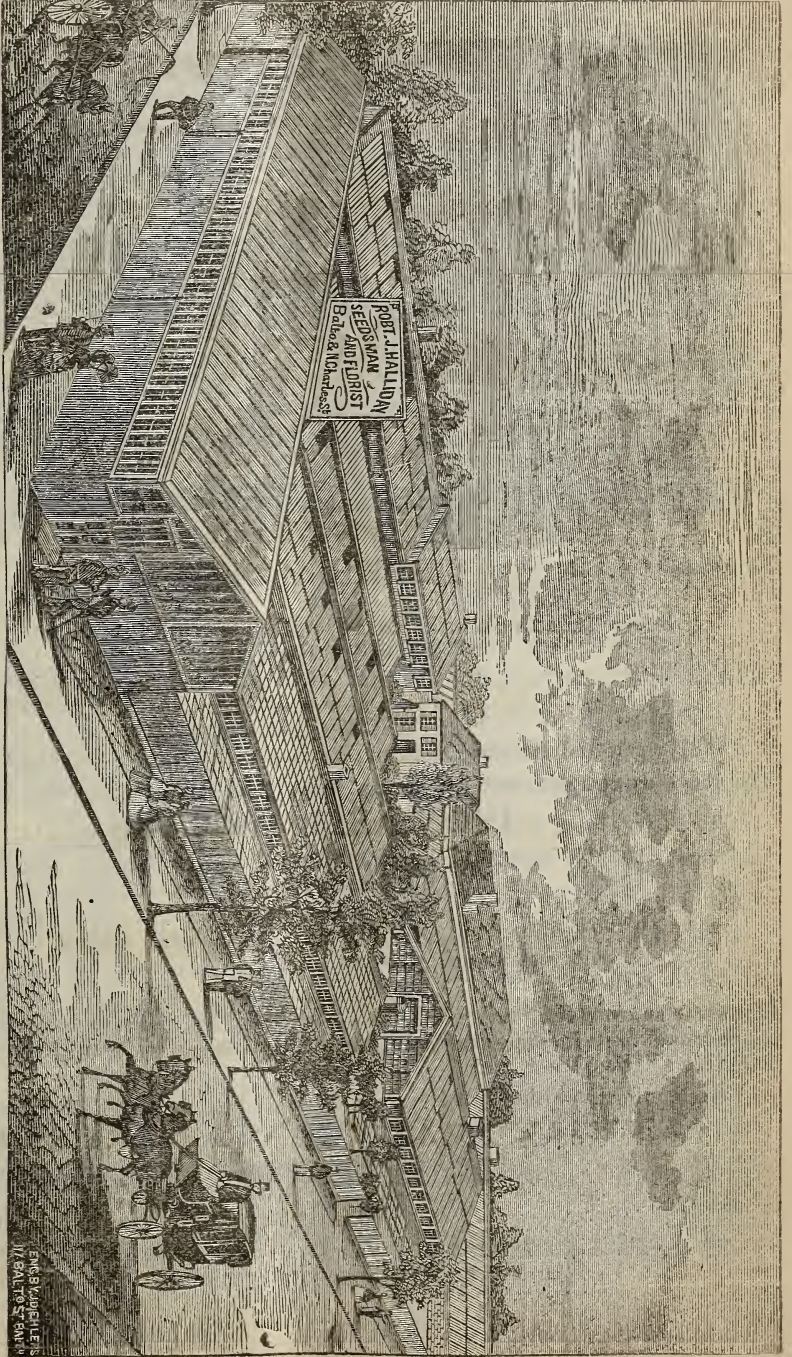
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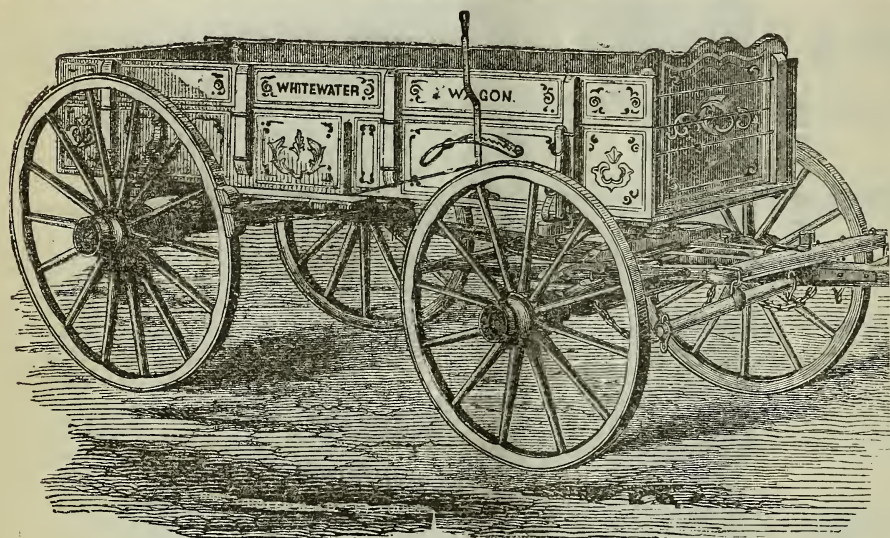
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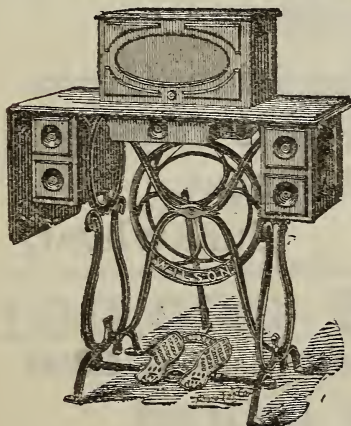
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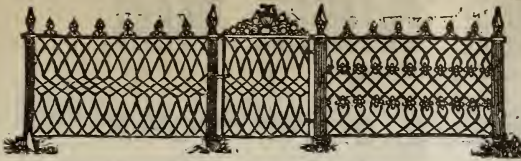
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Double Spout Hand or Power Sheller. Single Spout Shellers—all kinds.

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"Anderson's" Agricultural Steamer, for preparing feed for Stock The best in use.
Threshers and Separators—different kinds and sizes.

Horse Powers, all sizes and patterns.

Ox Yokes and Bows, Horse Power Road Scrapers, Hay and Straw Presses.

Plows, different kinds and sizes, Harrows, Cultivators, and all kinds of Farming and Horticultural Tools.

Address,

R. SINCLAIR & CO.

Dec-1y

62 Light Street, Baltimore, Md.

NOAH WALKER & CO.

THE

CELEBRATED CLOTHIERS,

OF BALTIMORE, MD.

Announce the introduction of a plan of ordering

CLOTHING AND UNDERWEAR BY LETTER,

To which they call your special attention. They will send on application their improved and accurate **RULES FOR SELF-MEASUREMENT**, and a full line of samples from their immense stock of

Cloths, Cassimeres, Coatings, Shirts &c., &c.

A large and well-assorted stock of **READY-MADE CLOTHING** always on hand, together with a full line of **FURNISHING GOODS.**

NOAH WALKER & CO.

Manufacturers and Dealers in Men's and Boys' Clothing and Furnishing Goods, either Ready-Made or Made to Order.

Nos. 165 & 167 W. BALTIMORE ST.,

Baltimore, Md.

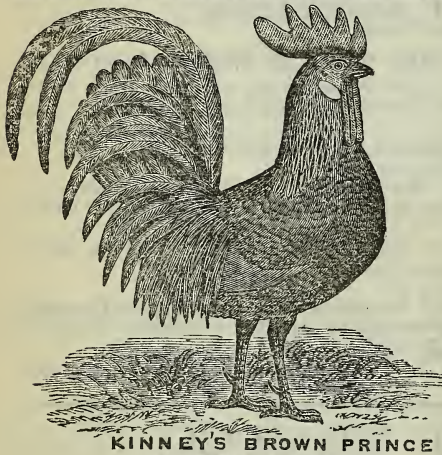
dec-1y

R. Q. TAYLOR,
OPPOSITE BARNUM'S HOTEL, Baltimore,
IMPORTER,
HATS, FURS, UMBRELLAS.

WM. W. PRETZMAN.

(s-ly)

G. E. S. LANSLOWNE,



F. J. KINNEY,
BREEDER OF
BROWN LEGHORN FOWLS,

ORIGINATOR AND BREEDER OF
WORCESTER COUNTY FOWLS.
Eggs for Hatching and Fowls for Sale
AT FAIR PRICES.

P. O. Address, Olean Street,
WORCESTER, MASS.

[YARDS AT TATNUCK.]

I claim to have bred Brown Leghorn Fowls as long as any person in America, and to have the LARGEST WHITE EAR-LOBE STOCK there is now in the world. Am breeding them at Buffalo, N. Y., for my western trade, and at several other places beside my Home Yards. Have over 2000 Thorough Bred Chicks.

I also offer to beat with said Brown Leghorns any other breed of fowls in the world—laying eggs, or for early poultry. They are non-sitters. Have taken 1st and special premiums at all the exhibitions I have attended this season. Am breeding from three 1st premium Cocks and Cockerels, and several 2d and 3d premiums. Have sold no PREMIUM birds. I MAKE A SPECIALTY OF

STRAWBERRIES, GRAPES & CURRANTS,

and have several acres under cultivation—have taken first premiums at the Worcester County Horticultural Society's annual exhibition, for largest and best collections Strawberries, five years in succession, and have sold Strawberries grown out of doors at a higher price per quart than any other man in the State. I also offer a limited number of Plants of my new seedling Strawberry, Kinney's No. 10. I have tested the No. 10 thoroughly, fruiting one acre the past season, and shall set 5 acres for next season. It is by far the most profitable Market Strawberry I am acquainted with. Is a seedling of Wilson crossed on Jucunda. Is a better berry in every respect than the Wilson, and nearly two weeks later. Is just what we have all been watching for. It does remarkably well in all soils where it has been tried. As hardy as Wilson, is stronger in growth, and as productive.

I shall sell a limited number of plants in the spring of 1875, at \$3 per dozen, \$20 per hundred, and \$100 per thousand.

BERKSHIRE PIGS
OF MOST FASHIONABLE STRAINS.
Partridge Cochins and White Leghorn
CHICKENS,

At \$4 each, or \$10 per Trio.

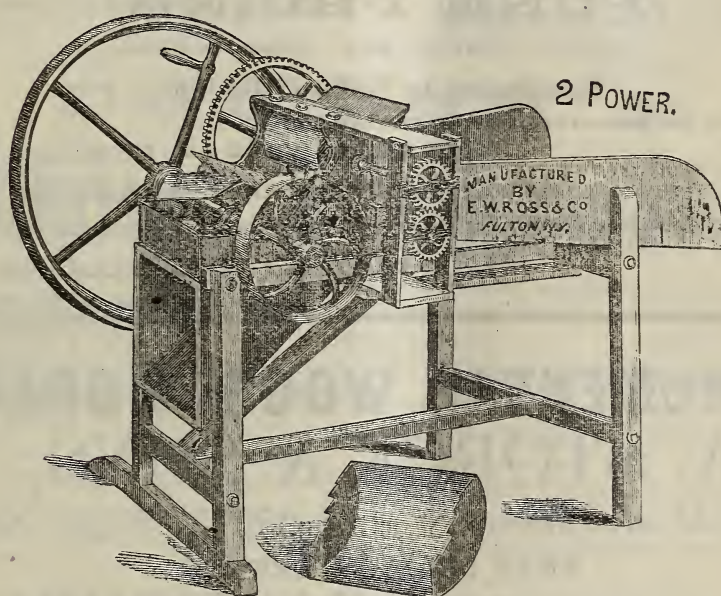
CHARLES S. TAYLOR,

nov6t

Wynona Stock Farm, Burlington, New Jersey.

THE CUMING'S IMPROVED FEED CUTTER.

The Only Perfect Machines
FOR CUTTING HAY, STRAW, STALKS,
AND ALL KINDS OF FODDER.



We make Six Sizes, with capacity from 500 lbs. to 3 tons per hour.

The CUMING'S CUTTERS are fifteen years ahead of all other makes. Fifteen years ago they were what other cutters are now, that is, geared cutters. The Cuming's are not geared, receiving the power direct upon the knives.

The No. 1 has three knives, all other sizes four.

The machines are made from the choicest material and perfectly finished, and are well known in the North and West, and can now be had in all the principal cities and towns of Pennsylvania, Maryland and the South. Send for circulars to

E. W. ROSS & CO., Sole Manufacturers,
decly *Fulton, Oswego Co., N. Y.*

MORO PHILLIP'S

GENUINE IMPROVED

SUPER-PHOSPHATE OF LIME.

STANDARD GUARANTEED.

Reduced in price, and improved in quality by the addition of Potash. This article is already too well known to require any comments upon its Agricultural value. FIFTEEN years experience has fully demonstrated to the agricultural community its lasting qualities on all crops, and the introduction of Potash gives it additional value.

Price \$50 Per Ton, 2000 lbs. Discount to Dealers.

PURE PHUINE

Superior to Peruvian Guano. Discount to Dealers.

Manufactured by MORO PHILLIPS.

Price \$50 Per Ton---2,000 Pounds. Discount to Dealers.

For sale at Manufacturer's Depots: { 110 S. DELAWARE AV., Philadelphia, Pa.
95 SOUTH STREET, Baltimore, Md.

And by Dealers in general throughout the country. Pamphlets mailed free on application.

MORO PHILLIPS,

Sole Proprietor and Manufacturer

GEO. J. STORCK.

ADOLPH STORCK.

EDW. J. STORCK.

MONUMENTAL WOOD WORKS.

A. STORCK & SONS,

No. 77 E. Monument St. and 259 N. Front Street,

NEAR BELAIR MARKET,

BALTIMORE.

DEALERS IN LUMBER.

WHITE PINE, of all sizes and qualities.

Weather-boarding, Partition Laths, Palings, Fencing, Shingles, &c.

YELLOW PINE Joists, Scantling and Floorings, on hand and made to order.

All kinds of Scroll and Ornamental Work—such as, Brackets, Barge Boarding, Finials, Arbor Sweeps, Mouldings, Newel's Bannisters, Balustrades, Bed-posts, Table Legs, Ten Pins and Balls, &c.

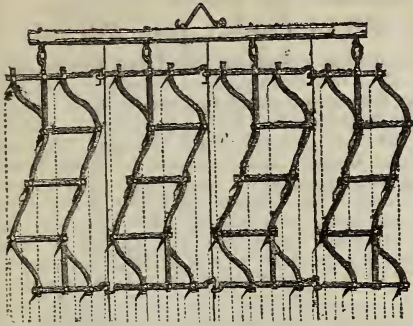
Particular attention given to getting out and working Hand Rails ready to put up to suit any style of stairway, for the Country Trade.

HUBS of all sizes and kinds a SPECIALTY.

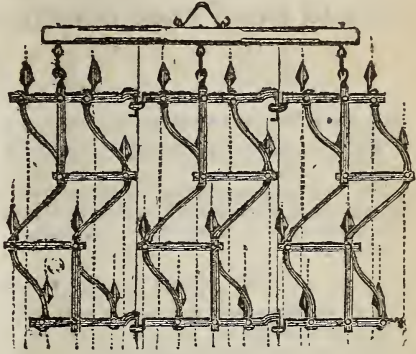
In offering the above articles we likewise desire to inform our friends in the country that we always BUY OR TAKE IN EXCHANGE for the same, Cedar, Locust and Chesnut Posts; Black Gum, White Oak and Locust Timber for Hubs; and large White Oak Logs for Meat Blocks.

may-ly

Nothing Succeeds like Success, based upon
Real Merit.



HARROW.



CULTIVATOR.

COLTON'S

All Iron and Steel

HARROWS & CULTIVATORS

Were never advertise and pushed for sale at distant markets, until five years experience and use among home and near-by buyers had demonstrated them to be beyond question

Pre-eminently Superior in Quality of Work and in Durability.

Within the last three years the demand has wonderfully increased and sales have been made to parties at all points between the Gulf of Mexico and St. Lawrence and the far West. During the past Summer and Fall another factory was erected and a duplicate set of machinery placed therein, the original set having been especially designed for making our implements. Since the first of December both establishments have been running on full time and will turn out during 1875 at least

6,000 All Iron and Steel Harrows and Cultivators,
THE MATERIAL FOR THAT NUMBER BEING ON HAND.

All things fairly considered these implements are the cheapest a farmer or planter can buy and will prove the most satisfactory in freedom from expenses for repairs; *there is not a particle of cast or malleable iron about either*, the material being entirely wrought iron and steel.

During the seven years of manufacture over 25,000 of Colton's All Iron and Steel Harrows and Cultivators have been sold; since the Spring of 1872, over 2,000 have been sold in New York.

This success is absolutely unapproached by any other Harrow and Cultivator on this Continent. Our Harrows have met in practical field trial with every competing implement of any general or even local reputation in Canada and New York AND WERE NEVER YET BEATEN UNDER ANY CIRCUMSTANCES WHATEVER AT A PUBLIC FIELD TRIAL; the Cultivator being a newer implement has not had many opportunities of competing practically but in the few instances where tried with others has been victorious each and every time.

[over]

COLTON'S HARROWS AND CULTIVATORS.

I am fully convinced that their general introduction would be of vast benefit to the farmers of the State.

Prof. ROBERTS, Cornell, Dec. 22d, 1874.

As pertinent to statements made on preceeding page the following are appended.

The Oneonta Manufacturing Company are our agents in Otsego Co., N. Y., but before "taking hold" and making themselves responsible for the worth of a new implement they made an exhaustive test which in part shows WHY our harrow is superior:

Oneonta, Otsego Co., May 6th, 1873.

R. P. COLTON—Dear Sir:—In a trial of your all Iron and Steel Harrow we have proved the following facts to our entire satisfaction.

1st. It will do as much good work in one day as any ordinary harrow will in two days.

2d. On uneven ground it will on account of its self adjusting qualities do better work than can possibly be done by other harrows.

3d. The draft of your Harrow is lighter than most plows used on the same land; tested by a Fairbanks Dynamometer the average draft was 310 lbs.

4th. Its Strength is very great. We drew it 20 rods and back over a sod field thickly imbedded with small and large stones; the harrow loosened all it went over, cleared itself of every one and sustained no damage not even a tooth being bent or loosened Signed by

D. W. FORD, Sec'y Oneonta M'fg. Co.

E. C. HODGE, Invent, Hodge's Reversib'e Plow.

O. HOUGHTALING, Farmer, and several others.

The following is specially printed for the benefit of agents and dealers.

Onondaga Hill, N. Y. June, 8th, 1874.

L. W. JOHNSTON,—Dear Sir:—In the Fall of 1873 we took the agency of Colton's All Iron and Steel Harrows and Cultivators, selling about a dozen that season; this Spring we have sold over Six DOZEN.

Among our customers are: Davis Cossitt Esq., Sheriff of this County, John Greenway, Esq., the great Brewer and extensive Farmer, A. B. Avery, Prest. Onondaga Co. Milk A-sociation, G. Spaulding, Esq. E. Makyes, Prest. Farmers Club and Fairs of Geddes, Onondaga and Lafayette Townships, and others equally well known and respected hereabouts. Our farmers talk highly of the merits of both implements, and we have never had any returned when left on trial with promise of being bought if satisfactory and superior in working.

STACKHOUSE & RAYNOR.

Our implements were never known or heard of in the district where the above were sold by Messrs. Stackhouse & Raynor, until they took hold of the business as stated.

PRICES.

The retail prices of Colton's All Iron and Steel Harrows and Cultivators will be as follows:

Harrows in 3 sections, 30 teeth, 6 ft spread, \$22 50

" " 4 " 40 " 8 " " 30.00

" " 5 " 50 " 10 " " 37.50

Cultivators in 3 sections, 24 teeth, 6ft spread, 32.00

Extra Cultivator, sections each, 10.00

" Harrow, " " 7 00

IN COMPARING COST of "ALL IRON AND STEEL HARROWS" with common wooden ones, REMEMBER that our 3 section harrow, will actually do as much work in a day as the best Scotch frame or 36 toothed square harrow, and the same power required to draw these latter will work our 4 section implement, which is WARRANTED to harrow 15 to 17 acres once over in the ordinary day's work of a man and team, WITH DRAFT NO GREATER than a two-horse plow in same land.

Our Cultivators are cheaper than any others of same width and work, while BOTH IMPLEMENTS ARE ABOVE COMPARISON AS TO DURABILITY; the material in all being entirely wrought iron and steel.

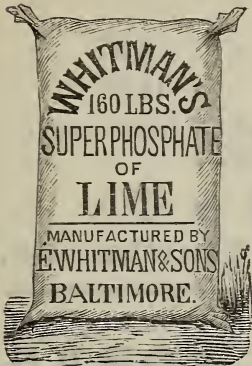
Manufactured and Warranted by R. P. COLTON.

E. WHITMAN & SONS,

BALTIMORE, MD.

Wholesale Agents at Manufacturers' Lowest Prices, for Maryland and the South.

PURE FERTILIZERS.



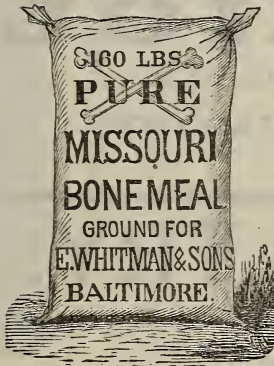
WHITMAN'S SUPER-PHOSPHATE OF LIME,

Manufactured only by E. WHITMAN & SONS,
IS THE
MOST RELIABLE PHOSPHATE IN THE MARKET.

Price \$50 Per Ton, in Sacks, of 160 pounds each.

MISSOURI BONE MEAL.

Its Superior an Impossibility.



Analysis : Ammonia..... 4.38
 Bone Phosphate of Lime..... 49.51

Which is the highest analysis yielded by pure bone. The largest particles are smaller than timothy seed.

Price \$48 Per Ton, in Sacks of 160 lbs. each.

CAUTION !

As some parties are offering as Missouri Bone Meal other than the genuine article, we caution all persons that none is genuine unless the bags are branded as shown in the accompanying cut. Our Trade Mark is copyrighted, and we take the entire production of the Mill, and all infringements upon our copyright will be prosecuted to the full extent of the law. This article is perfectly pure, and has made a reputation for excellence never equaled by any Bone offered in this market. We do not claim that Bones ground in Missouri are any better than others, but we do claim that the Bone ground by our Mill is perfectly pure, and in unusually fine condition. "Missouri Bone Meal" is a name that we gave to designate this particular article; and to keep other dealers from palming off their goods upon those desiring the genuine Missouri Bone Meal, we have had our Trade Mark copyrighted.

New Jersey Ground Bone.

PRICE \$40 PER TON.

We have sold hundreds of tons of this Bone, and it has invariably given satisfaction. Peruvian Guano, South Carolina Bone (fine ground or dissolved,) Plaster, Sulphuric Acid, Potash, Sulphate of Soda, Nitrate of Soda, and all kinds of Fertilizer materials always on hand and for sale at the lowest market prices.

E. WHITMAN & SONS,

Dealers in Agricultural Implements and Garden Seeds,

145 & 147 W. PRATT ST., Baltimore, Md.

Bone Flour & Bone Dust

ANALYSIS:

AMMONIA, - - - - - 4.37

BONE PHOSPHATE OF LIME, - - - 44.56

Ground by ourselves, and warranted pure. Superior to any offered in this market.
Packed in good, strong bags. Price \$43 per ton.

J. J. TURNER & CO.

42 Pratt Street, Baltimore.

mar4t

WM. STUART SYMINGTON.

THOS. A. SYMINGTON.

PATAPSCO CHEMICAL WORKS.

SYMINGTON BROS. & CO.

MANUFACTURERS OF

OIL VITRIOL

AND OTHER CHEMICALS.

Works on Locust Point, }
Office, 44 South Street, } **BALTIMORE.**

Feb-1y

CHOICE POULTRY.

MAKE A SPECIALTY OF

Light Brahmas, Black Cochins,

Buff Cochins, and Sebright Bantams,

And can also furnish most of the varieties of

PURE BRED FOWLS, DUCKS AND TURKIES,

At very low prices for pure bloods. Have a large stock Light Brahmas on hand, and can fill orders in any quantities with No. 1 birds.

Satisfaction given. No Circulars, but gladly write any information.

Prices usually from \$4 to \$5 each—some *very extra* birds a little higher. Prices include boxing, &c.

A few BERKSHIRE SWINE, same stock as stock 1st Prize at Connecticut State Agricultural Exhibition last September. Extra fine specimens \$10 each at 8 weeks old.

C. P. NETTLETON,

nov-1y

Box 530, Birmingham, Connecticut.